

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE\*

FORM APPROVED  
OMB NO. 1040-0136  
Expires: February 28, 1995

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

TYPE OF WORK

DRILL ☒

DEEPEN ☐

TYPE OF WELL

☐ OIL WELL ☒ GAS WELL ☐ OTHER ☒ SINGLE ZONE ☐ MULTIPLE ZONE

2. NAME OF OPERATOR

QEP UINTA BASIN, INC.

Contact: Jan Nelson

E-Mail: jan.nelson@questar.com

3. ADDRESS

11002 E. 17500 S. Vernal, Ut 84078

Telephone number

Phone 435-781-4331 Fax 435-781-4323

4. LOCATION OF WELL (Report location clearly and in accordance with and State requirements\*)

At Surface 619859X 2036' FNL 1790' FEL SWNE SECTION 19, T8S, R21E

At proposed production zone 44407254 40110192 - 109.593639

14. DISTANCE IN MILES FROM NEAREST TOWN OR POSTOFFICE\*

7 +/- MILES EAST OF OURAY, UTAH

15. DISTANCE FROM PROPOSED LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT.

(also to nearest drig, unit line if any)

1790' +/-

18. DISTANCE FROM PROPOSED location to nearest well, drilling, completed, applied for, on this lease, ft

16. NO. OF ACRES IN LEASE

440.00

19. PROPOSED DEPTH

11,825'

21. ELEVATIONS (Show whether DF, RT, GR, ect.)

4677.0' GR

22. DATE WORK WILL START

ASAP

9. API NUMBER:

43-047-38267

10. FIELD AND POOL, OR WILDCAT

CYPRUM HILLS Unders. gas

11. SEC., T, R, M, OR BLK & SURVEY OR AREA

SEC. 19, T8S, R21E Mer SLB

12. COUNTY OR PARISH

Uintah

13. STATE

UT

17. NO. OF ACRES ASSIGNED TO THIS WELL

40

20. BLM/BIA Bond No. on file

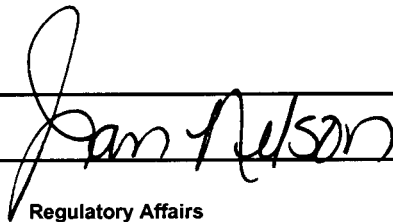
ESB000024

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

1. Well plat certified by a registered surveyor.
2. A Drilling Plan
3. A surface Use Plan (if location is on National Forest System Lands,
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification.
6. Such other site specific information and/or plans as may be required by the authorized officer.

SIGNED



Name (printed/typed) Jan Nelson

DATE 6-5-06

TITLE

Regulatory Affairs

(This space for Federal or State office use)

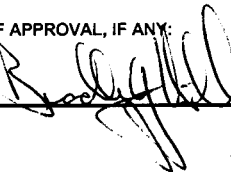
PERMIT NO.

43-047-38267

APPROVAL DATE

CONDITIONS OF APPROVAL, IF ANY:

APPROVED BY



TITLE

BRADLEY G. HILL  
ENVIRONMENTAL MANAGER

DATE

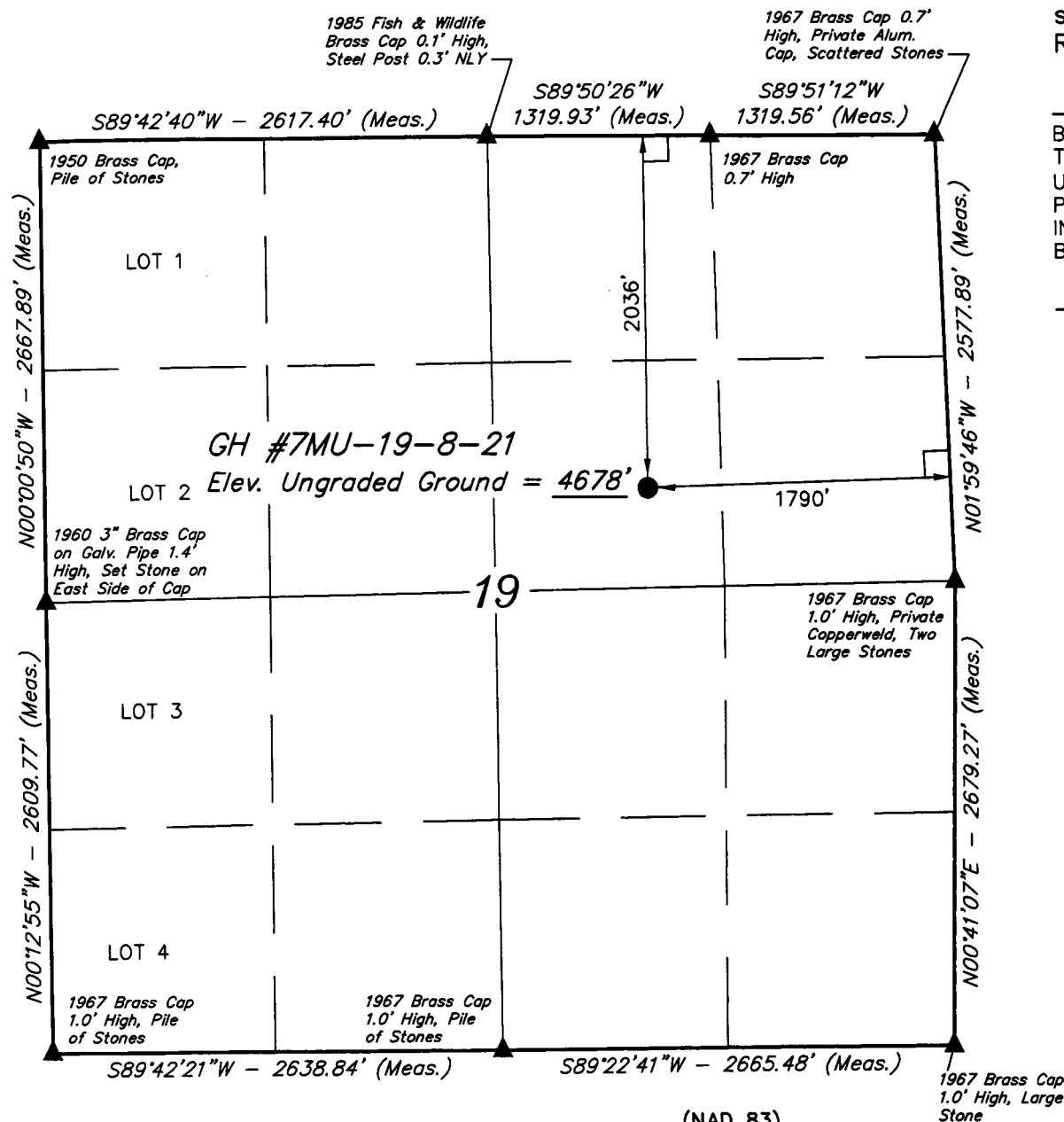
06-15-06

\*See Instructions On Reverse Side

Title 18 U.S.C Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction

Federal Approval of this  
Action Is Necessary

T8S, R21E, S.L.B.&M.



LEGEND:

— = 90° SYMBOL

● = PROPOSED WELL HEAD.

▲ = SECTION CORNERS LOCATED.

(NAD 83)  
 LATITUDE = 40°06'36.68" (40.110189)  
 LONGITUDE = 109°35'38.61" (109.594058)  
 (NAD 27)  
 LATITUDE = 40°06'36.81" (40.110225)  
 LONGITUDE = 109°35'36.12" (109.593367)

QUESTAR EXPLORATION & PRODUCTION

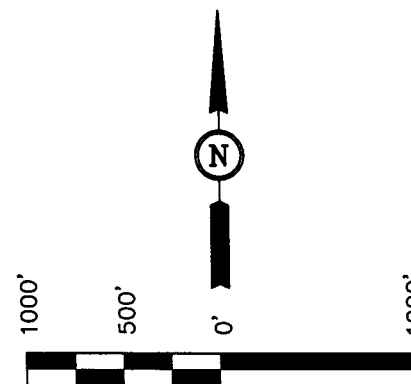
Well location, GH #7MU-19-8-21, located as shown in the SW 1/4 NE 1/4 of Section 19, T8S, R21E, S.L.B.&M. Uintah County, Utah.

BASIS OF ELEVATION

BENCH MARK 20EAM LOCATED IN THE SE 1/4 OF SECTION 35, T8S, R21E, S.L.B.&M. TAKEN FROM THE OURAY SE, QUADRANGLE, UTAH, UINTAH COUNTY, 7.5 MINUTE QUAD. (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 4697 FEET.

BASIS OF BEARINGS

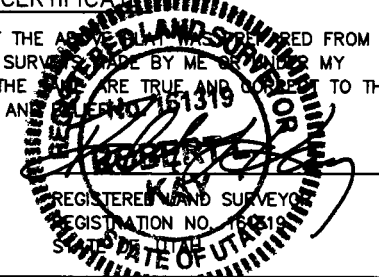
BASIS OF BEARINGS IS A G.P.S. OBSERVATION.



SCALE

CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEY MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.



UINTAH ENGINEERING & LAND SURVEYING

85 SOUTH 200 EAST - VERNAL, UTAH 84078

(435) 789-1017

SCALE 1" = 1000'	DATE SURVEYED: 04-03-06	DATE DRAWN: 04-12-06
PARTY D.A. T.B. L.K.	REFERENCES G.L.O. PLAT	
WEATHER COOL	FILE QUESTAR EXPLORATION & PRODUCTION	

**Additional Operator Remarks**

QEP Uinta Basin, Inc. proposes to drill a well to 11,825' to test the MesaVerde. If productive, casing will be run and the well completed. If dry, the well will be plugged and abandoned as per BLM and State of Utah requirements"

Please see QEP Uinta Basin, Inc. Standard Operating Practices dated October 18, 2005, for Mesa Verde Formation Wells located in Red Wash, Wonsits Valley, Gypsum Hills, White River, Glen Bench, and Undesignated fields in Townships 07, 08 and 09 South, Ranges 21 to 25 East.

Please be advised that QEP Uinta Basin Inc. agrees to be responsible under the terms and conditions of the lease for the operations conducted upon the lease lands.

Bond coverage for this well is provided by Bond No.ESB000024. The principal is QEP Uinta Basin Inc. via surety as consent as provided for the 43 CFR 3104.2.

DRILLING PROGRAM

ONSHORE OIL & GAS ORDER NO. 1  
Approval of Operations on Onshore  
Federal Oil and Gas Leases

All lease and/or unit operations will be conducted in such a manner that full compliance is made with applicable laws, regulations (43 CFR 3100), Onshore Oil and Gas No. 1, and the approved plan of operations. The operator is fully responsible for the actions of his subcontractors. A copy of these conditions will be furnished the field representative to insure compliance.

1. Formation Tops

The estimated tops of important geologic markers are as follows:

<u>Formation</u>	<u>Depth</u>	<u>Prod. Phase Anticipated</u>
Uinta	Surface	
Green River	2576'	
Wasatch	6022'	Gas
Mesa Verde	9375'	
Sego	11730'	
TD	11825'	

2. Anticipated Depths of Oil Gas Water and Other Mineral Bearing Zones

The estimated depths at which the top and bottom of the anticipated water, oil, gas. Or other mineral bearing formations are expected to be encountered are as follows:

<u>Substance</u>	<u>Formation</u>	<u>Depth</u>
Oil/Gas	Mesa Verde	11,825'

All fresh water and prospectively valuable minerals encountered during drilling will be recorded by depth and adequately protected. All oil and gas shows will be tested to determine commercial potential.

All water shows and water-bearing sands will be reported to the BLM in Vernal, Utah. Copies of State of Utah form OGC-8-X are acceptable. If flows are detected, samples will be submitted to the BLM along with any water analyses conducted. Fresh water will be obtained from Wonsits Valley water right # A36125 (which was filed on May 7, 1964,) or Red Wash water right # 49-2153 (which was filed on March 25, 1960). It was determined by the Fish and Wildlife Service that any water right number filed before 1989 is not depleting to the Upper Colorado River System, to supply fresh water for drilling purposes.



DRILLING PROGRAM

All water resulting from drilling operations will be disposed of at Red Wash Central Battery Disposal Site; SWSE, Section 27, T7S, R23E or Wonsits Valley Disposal Site; SWNW, Section 12, T8S, R21E.

3. Operator's Specification for Pressure Control Equipment:

- A. 5,000 psi W.P. Double Gate BOP or Single Gate BOP (schematic attached)
- B. Functional test daily
- C. All casing strings shall be pressure tested (0.2 psi/foot or 1500 psi, (or 70% of burst whichever is greater) prior to drilling the plug after cementing; test pressure shall not exceed the internal yield pressure of the casing.
- D. Ram type preventers and associated equipment shall be tested to approved stack working pressure if isolated by test plug or to 50 percent of internal yield pressure of casing whichever is less. BOP and related equipment shall meet the minimum requirements of Onshore Oil and Gas Order No. 2 for equipment and testing requirements, procedures, etc..., for a 5M system and individual components shall be operable as designed.

4. Casing Program

	<u>Depth</u>	<u>Hole Size</u>	<u>Csg Size</u>	<u>Type</u>	<u>Weight</u>
Surface	1600'	12 1/4"	9-5/8"	J-55	36 lb/ft (new) LT&C
Production	7500'	8 3/4"	4 -1/2"	P-110	11.60 lb/ft (new)LT&C
TD	11825'	7 7/8"	4- 1/2"	P-110	11.60 lb/ft (new)LT&C

5. Auxiliary Equipment

- A. Kelly Cock – yes
- B. Float at the bit – no
- C. Monitoring equipment on the mud system – visually and/or PVT/Flow Show
- D. Full opening safety valve on the rig floor – yes
- E. Rotating Head – yes  
If drilling with air the following will be used:

## DRILLING PROGRAM

- F. The blooie line shall be at least 6" in diameter and extend at least 100' from the well bore into the reserve/blooie pit.
- G. Blooie line ignition shall be provided by a continuous pilot (ignited when drilling below 500').
- H. Compressor shall be tied directly to the blooie line through a manifold.
- I. A mister with a continuous stream of water shall be installed near the end of the blooie lines for dust suppression.

Surface hole will be drilled with air, air/mist, foam, or mud depending on hole conditions. Drilling below surface casing will be with water based drilling fluids consisting primarily of fresh water, bentonite, lignite, caustic, lime, soda ash and polymers. No chromates will be used. It is not intended to use oil in the mud, however, in the event it is used, oil concentration will be less than 4% by volume. Maximum anticipated mud weight is 11.5 ppg.

No minimum quantity of weight material will be required to be kept on location.

PVT/Flow Show will be used from base of surface casing to TD.

Gas detector will be used from surface casing depth to TD.

### 6. Testing, logging and coring program

- A. Cores – none anticipated
- B. DST – none anticipated

Logging – Mud logging – 4500 to TD  
GR-SP-Induction  
Neutron Density  
MRI

- C. Formation and Completion Interval: Mesa Verde interval, final determination of completion will be made by analysis of logs.  
Stimulation – Stimulation will be designed for the particular area of interest as encountered.

DRILLING PROGRAM

7. Cementing Program

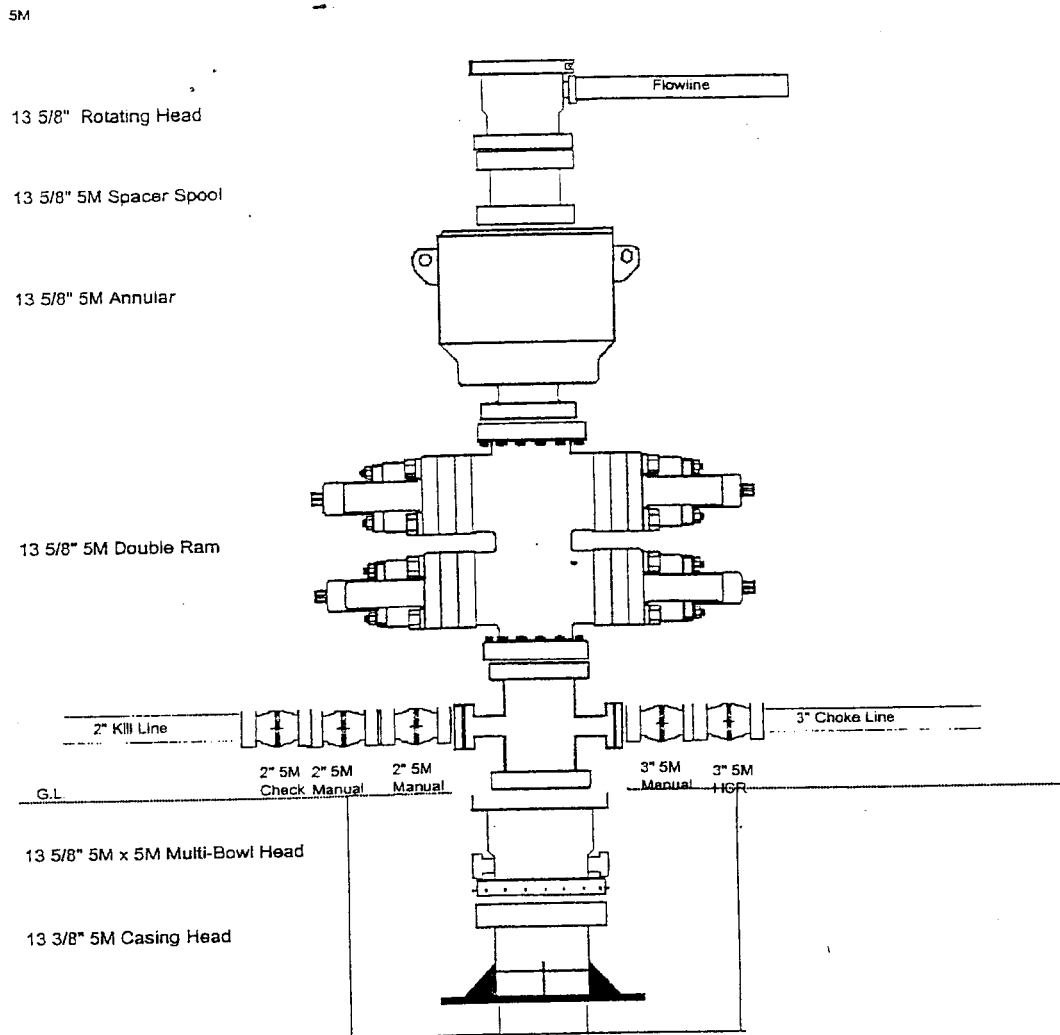
<u>Casing</u>	<u>Volume</u>	<u>Type &amp; Additives</u>
Surface	913sx	Class "G" single slurry mixed to 15.6 ppg, yield = 1.19 cf/sx. Cement to surface with 160 cf (913sx) calculated. Tail plug used. Allowed to set under pressure
Production	Lead-805sx* Tail-1899sx*	Lead/Tail oilfield type cement circulated in place . Tail slurry: Class "G" + gilsonite and additives as required, mixed to 14.8 ppg, yield = 1.34 cf/sx. Tail to 5522' (±500' above production zone).  Cement Characteristics: Lead slurry: Class "G" + extender and additives as required, mixed to 11.0 ppg, yield = 3.82 cf/sx. Lead to surface. Tail plug used. Allowed to set under pressure.

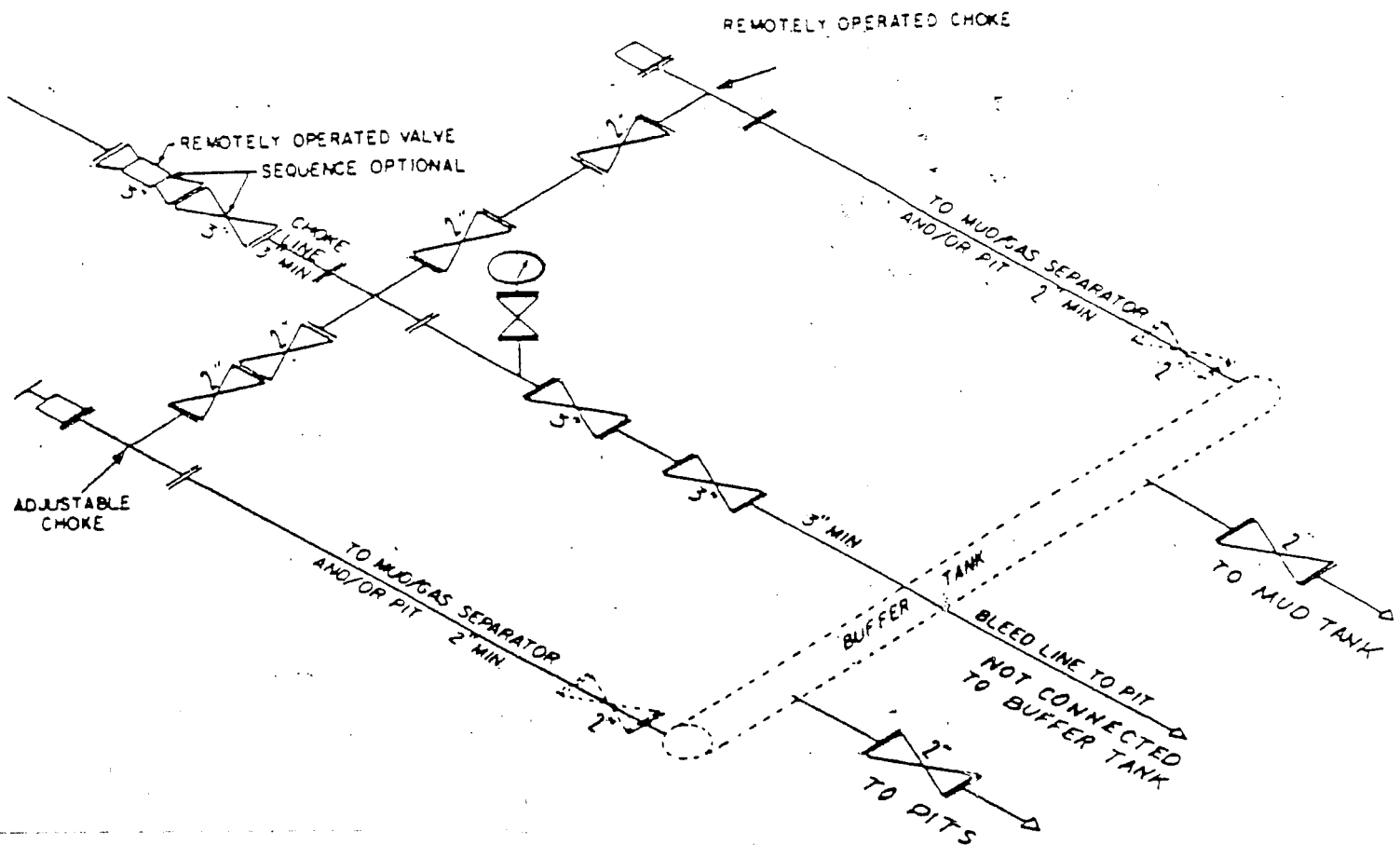
\*Final cement volumes to be calculated from caliper log with an attempt to be made to circulate cement to the surface. A bond log will be run across the zone of interest and across zones as required by the authorized officer to insure protection of natural resources.

8. Anticipated Abnormal Pressures and Temperatures, Other Potential Hazards

No abnormal temperatures or pressures are anticipated. No H<sub>2</sub>S has been encountered in or known to exist from previous wells drilled to similar depths in the general area. Maximum anticipated bottom hole pressure equals approximately 5128.0 psi. Maximum anticipated bottom hole temperature is 140° F.

# EXHIBIT B SCHEMATIC DIAGRAM OF 5,000 PSI BOP STACK





② 5M CHOKE MANIFOLD EQUIPMENT — CONFIGURATION OF CHOKES MAY VARY

**QEP UINTA BASIN, INC.  
GH 7MU-19-8-21  
2036' FNL 1790' FEL  
SWNE, SECTION 19, T8S, R21E  
UINTAH COUNTY, UTAH  
LEASE # UTU-68220**

**ONSHORE ORDER NO. 1**

**MULTI – POINT SURFACE USE & OPERATIONS PLAN**

**1. Existing Roads:**

The proposed well site is approximately 7 miles east of Ouray, Utah.

Refer to Topo Maps A and B for location of access roads within a 2 – mile radius.

There will be no improvements made to existing roads.

**2. Planned Access Roads:**

Please see QEP Uinta Basin, Inc. Standard Operating Practices dated October 18, 2005, for Mesa Verde Formation Wells located in Red Wash, Wonsits Valley, Gypsum Hills, White River, Glen Bench, and Undesignated fields in Townships 07, 08 and 09 South, Ranges 21 to 25 East.

Refer to Topo Map B for the location of the proposed access road.

**3. Location of Existing Wells Within a 1 – Mile Radius:**

Please refer to Topo Map C.

**4. Location of Existing & Proposed Facilities:**

Please see QEP Uinta Basin, Inc. Standard Operating Practices dated October 18, 2005, for Mesa Verde Formation Wells located in Red Wash, Wonsits Valley, Gypsum Hills, White River, Glen Bench, and Undesignated fields in Townships 07, 08 and 09 South, Ranges 21 to 25 East.

Refer to Topo Map D for the location of the proposed pipeline.

**5. Location and Type of Water Supply:**

Please see QEP Uinta Basin, Inc. Standard Operating Practices dated October 18, 2005, for Mesa Verde Formation Wells located in Red Wash, Wonsits Valley, Gypsum Hills, White River, Glen Bench, and Undesignated fields in Townships 07, 08 and 09 South, Ranges 21 to 25 East.

**6. Source of Construction Materials:**

Please see QEP Uinta Basin, Inc. Standard Operating Practices dated October 18, 2005, for Mesa Verde Formation Wells located in Red Wash, Wonsits Valley, Gypsum Hills, White River, Glen Bench, and Undesignated fields in Townships 07, 08 and 09 South, Ranges 21 to 25 East.

7. **Methods of Handling Waste Materials:**

Please see QEP Uinta Basin, Inc. Standard Operating Practices dated October 18, 2005, for Mesa Verde Formation Wells located in Red Wash, Wonsits Valley, Gypsum Hills, White River, Glen Bench, and Undesignated fields in Townships 07, 08 and 09 South, Ranges 21 to 25 East.

8. **Ancillary Facilities:**

Please see QEP Uinta Basin, Inc. Standard Operating Practices dated October 18, 2005, for Mesa Verde Formation Wells located in Red Wash, Wonsits Valley, Gypsum Hills, White River, Glen Bench, and Undesignated fields in Townships 07, 08 and 09 South, Ranges 21 to 25 East.

9. **Well Site Layout:** (See Location Layout Diagram)

The attached Location Layout Diagram describes drill pad cross-sections, cuts and fills and locations of the mud tanks, reserve pit, flare pit, pipe racks, trailer parking, spoil dirt stockpile(s), and surface material stockpile(s).

Please see the attached diagram to describe rig orientation, parking areas, and access roads.

A pit liner is required. A felt pit liner will be required if bedrock is encountered.

10. **Plans for Reclamation of the Surface:**

Please see QEP Uinta Basin, Inc. Standard Operating Practices dated October 18, 2005, for Mesa Verde Formation Wells located in Red Wash, Wonsits Valley, Gypsum Hills, White River, Glen Bench, and Undesignated fields in Townships 07, 08 and 09 South, Ranges 21 to 25 East.

**Interim Reclamation**

Please see attached Interim Reclamation plan.

Once the well is put onto production, QEP will reclaim as much of the well pad as possible that will allow for operations to continue in a safe and reasonable manner. Reseeding will be done in the spring or fall of every year to allow winter precipitation to aid in the success of reclamation.

**Seed Mix:**

*Interim Reclamation:*

9 lbs Hycrest Crested Wheatgrass

3lbs Forage Kochia

*Final Reclamation:*

Seed Mix # 1      3 lbs. Fourwing Saltbush, 3 lbs. Indian Rice Grass, 1 lb. Needle & Threadgrass

4 lbs. Hycrest Crested Wheat

11. **Surface Ownership:**

Ute Tribe

PO Box 190

Ft. Duchesne, UT 84026

(435) 722-5141

12. **Other Information**

A Class III archaeological survey was conducted by Montgomery Archaeology Consultants. A copy of this report was submitted directly to the appropriate agencies by Montgomery Archaeology Consultants. Cultural resource clearance was recommended for this location.

**Lessee's or Operator's Representative:**

Jan Nelson  
Red Wash Rep.  
QEP Uinta Basin, Inc.  
11002 East 17500 South  
Vernal, Utah 84078  
(435) 781-4331

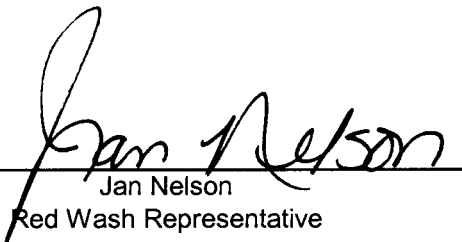
**Certification:**

All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil & Gas Orders, the approved plan of operations, and any applicable Notice to Lessees.

QEP Uinta Basin Inc. will be fully responsible for the actions of their subcontractors.

A complete copy of the approved Application for Permit to Drill will be furnished to the field representative(s) to ensure compliance and shall be on location during all construction and drilling operations.

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which currently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by QEP Uinta Basin, Inc. it's contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

  
\_\_\_\_\_  
Jan Nelson  
Red Wash Representative

\_\_\_\_\_  
05-Jun-06  
Date



# QUESTAR EXPLR. & PROD.

GH #7MU-19-8-21

LOCATED IN UINTAH COUNTY, UTAH  
SECTION 19, T8S, R21E, S.L.B.&M.

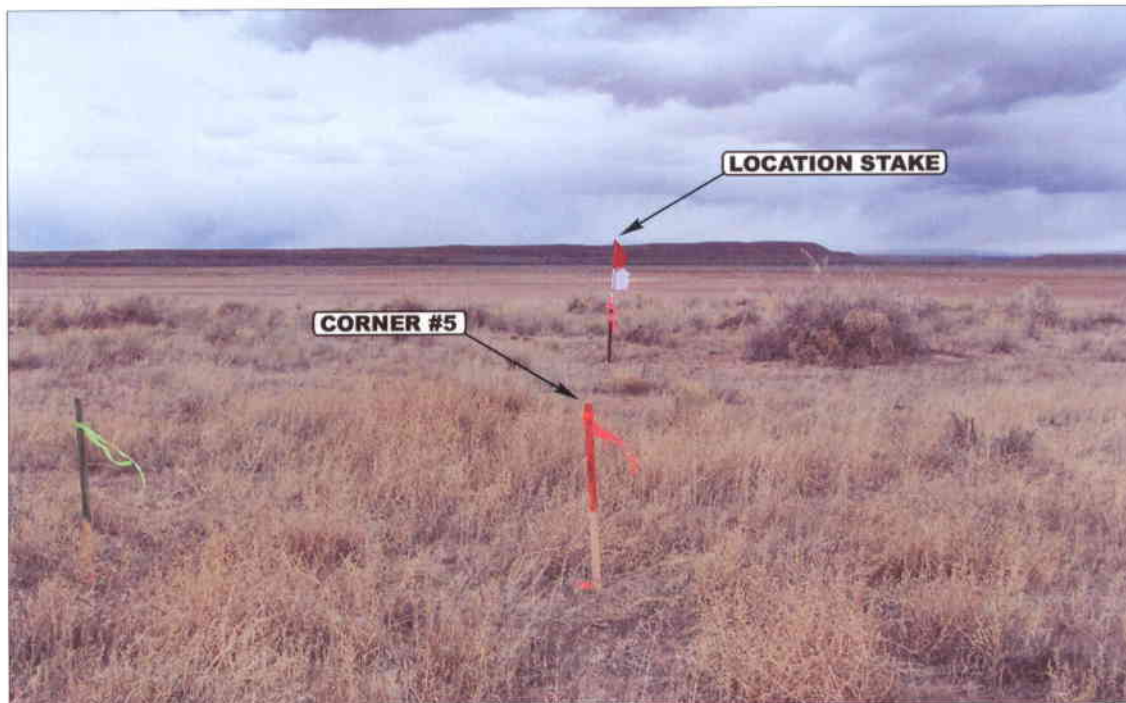


PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKE

CAMERA ANGLE: NORTHWESTERLY



PHOTO: VIEW FROM BEGINNING OF PROPOSED ACCESS

CAMERA ANGLE: WESTERLY



Since 1964

UELS

Uintah Engineering & Land Surveying

85 South 200 East Vernal, Utah 84078  
435-789-1017 uels@uelsinc.com

LOCATION PHOTOS

04 10 06  
MONTH DAY YEAR

PHOTO

TAKEN BY: D.A.

DRAWN BY: LDK

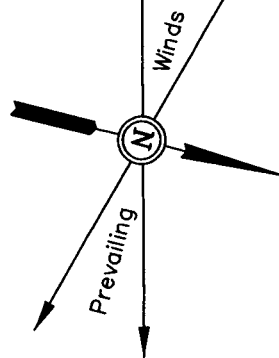
REVISED: 00-00-00

# QUESTAR EXPLR. & PROD.

FIGURE #1

## LOCATION LAYOUT FOR

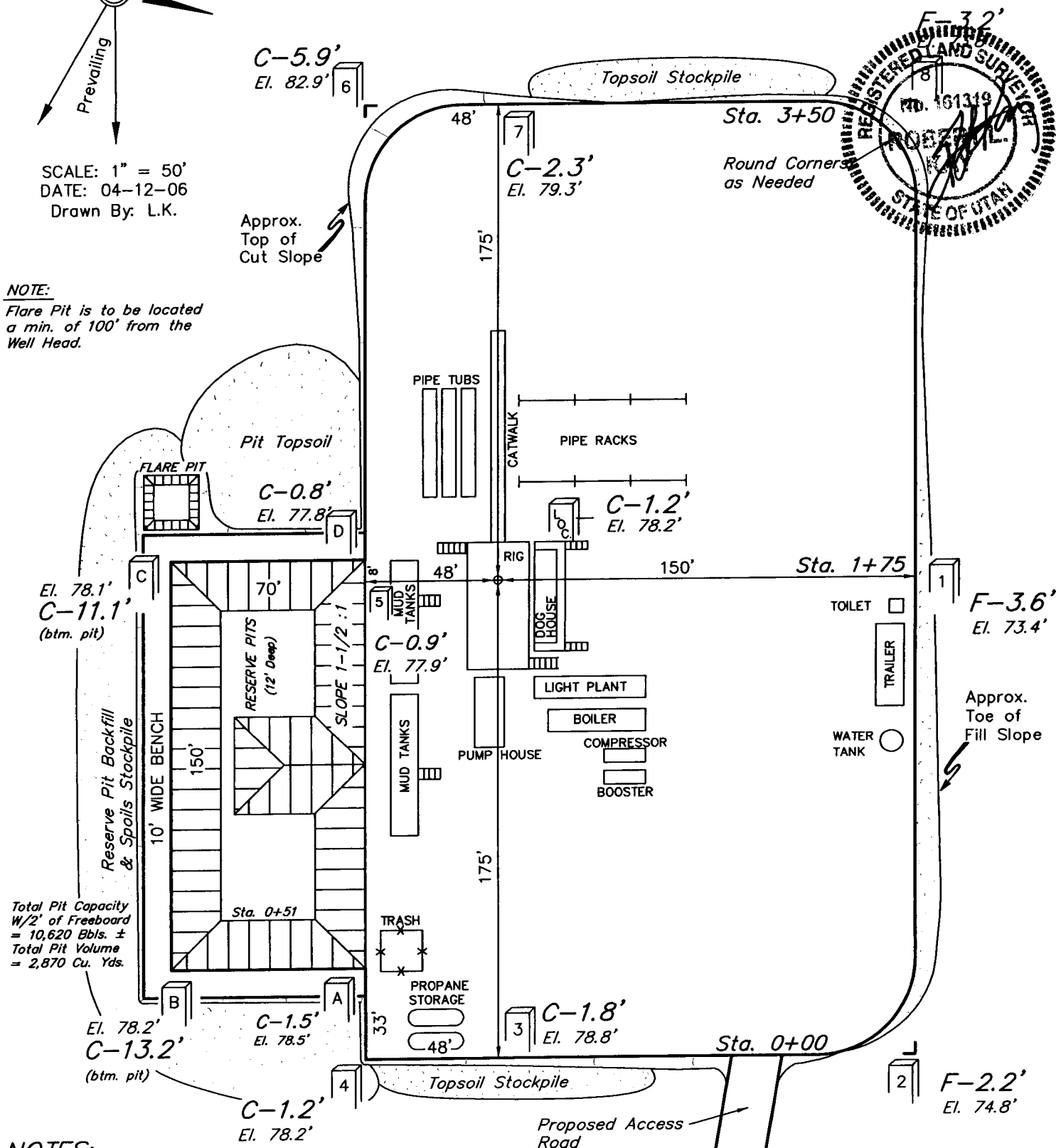
GH #7MU-19-8-21  
SECTION 19, T8S, R21E, S.L.B.&M.  
2036' FNL 1790' FEL



SCALE: 1" = 50'  
DATE: 04-12-06  
Drawn By: L.K.

### NOTE:

Flare Pit is to be located  
a min. of 100' from the  
Well Head.



### NOTES:

Elev. Ungraded Ground At Loc. Stake = 4678.2'  
FINISHED GRADE ELEV. AT LOC. STAKE = 4677.0'

UINTAH ENGINEERING & LAND SURVEYING  
85 So. 200 East \* Vernal, Utah 84078 \* (435) 789-1017

# QUESTAR EXPLR. & PROD.

FIGURE #2

## TYPICAL CROSS SECTIONS FOR

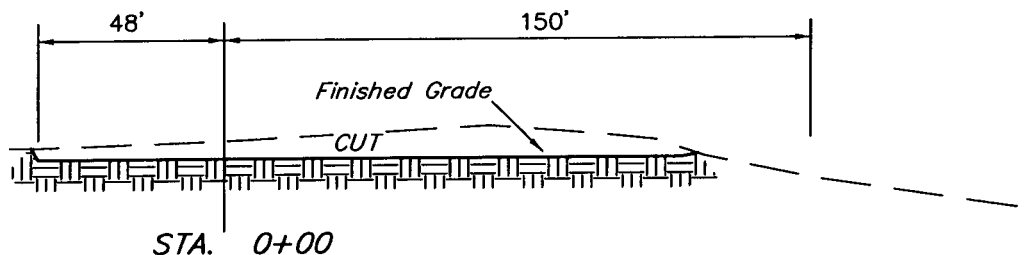
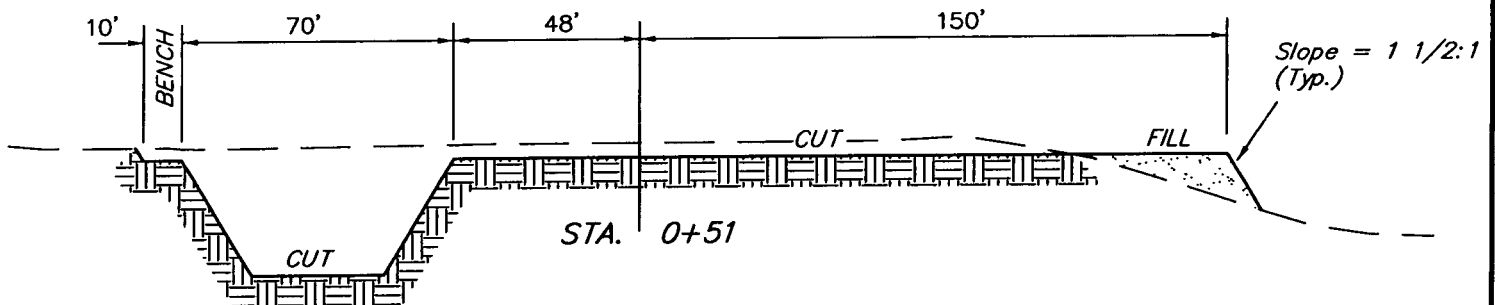
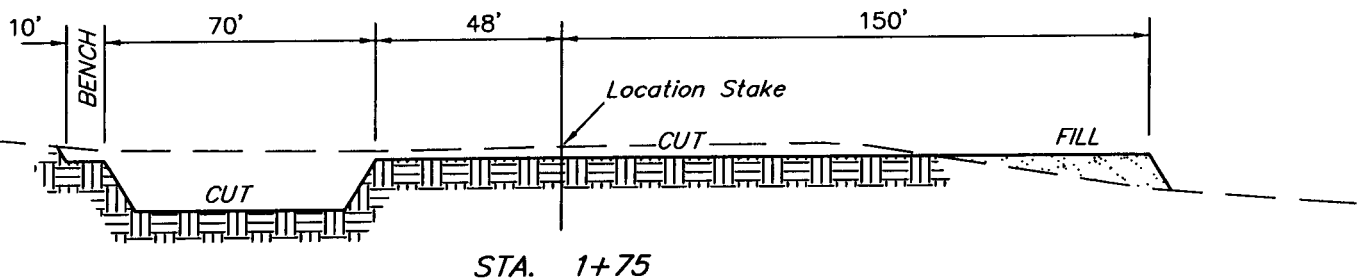
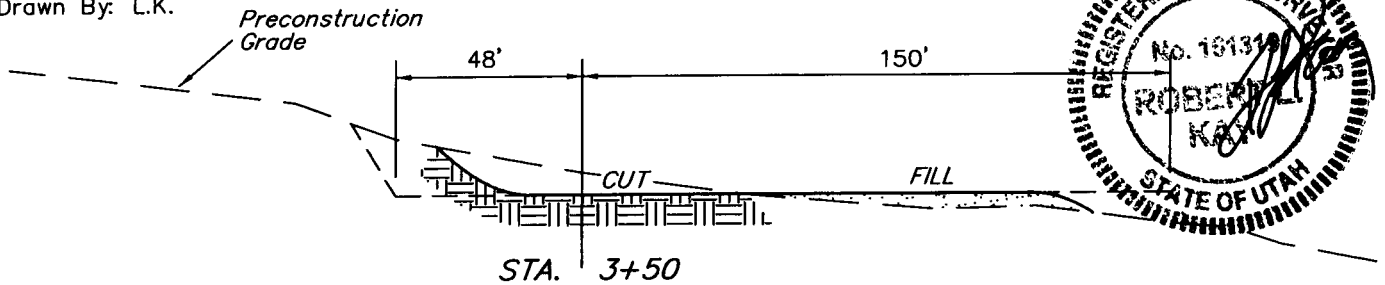
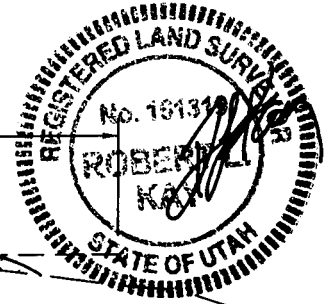
GH #7MU-19-8-21

SECTION 19, T8S, R21E, S.L.B.&M.

2036' FNL 1790' FEL

1" = 20'  
X-Section  
Scale  
1" = 50'

DATE: 04-12-06  
Drawn By: L.K.



### NOTE:

Topsoil should not be Stripped Below Finished Grade on Substructure Area.

### APPROXIMATE YARDAGES

CUT  
(12") Topsoil Stripping = 3,280 Cu. Yds.  
Remaining Location = 3,690 Cu. Yds.  
  
TOTAL CUT = 6,970 CU.YDS.  
FILL = 2,250 CU.YDS.

### \* NOTE:

FILL QUANTITY INCLUDES 5% FOR COMPACTION

Excess Material = 4,720 Cu. Yds.  
Topsoil & Pit Backfill = 4,720 Cu. Yds.  
(1/2 Pit Vol.)  
EXCESS UNBALANCE = 0 Cu. Yds.  
(After Interim Rehabilitation)

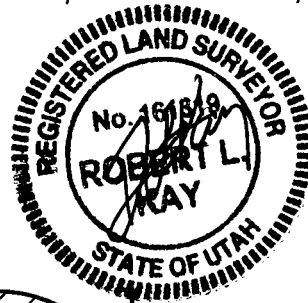
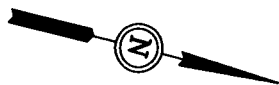
UINTAH ENGINEERING & LAND SURVEYING  
85 So. 200 East \* Vernal, Utah 84078 \* (435) 789-1017

QUESTAR EXPLR. & PROD.

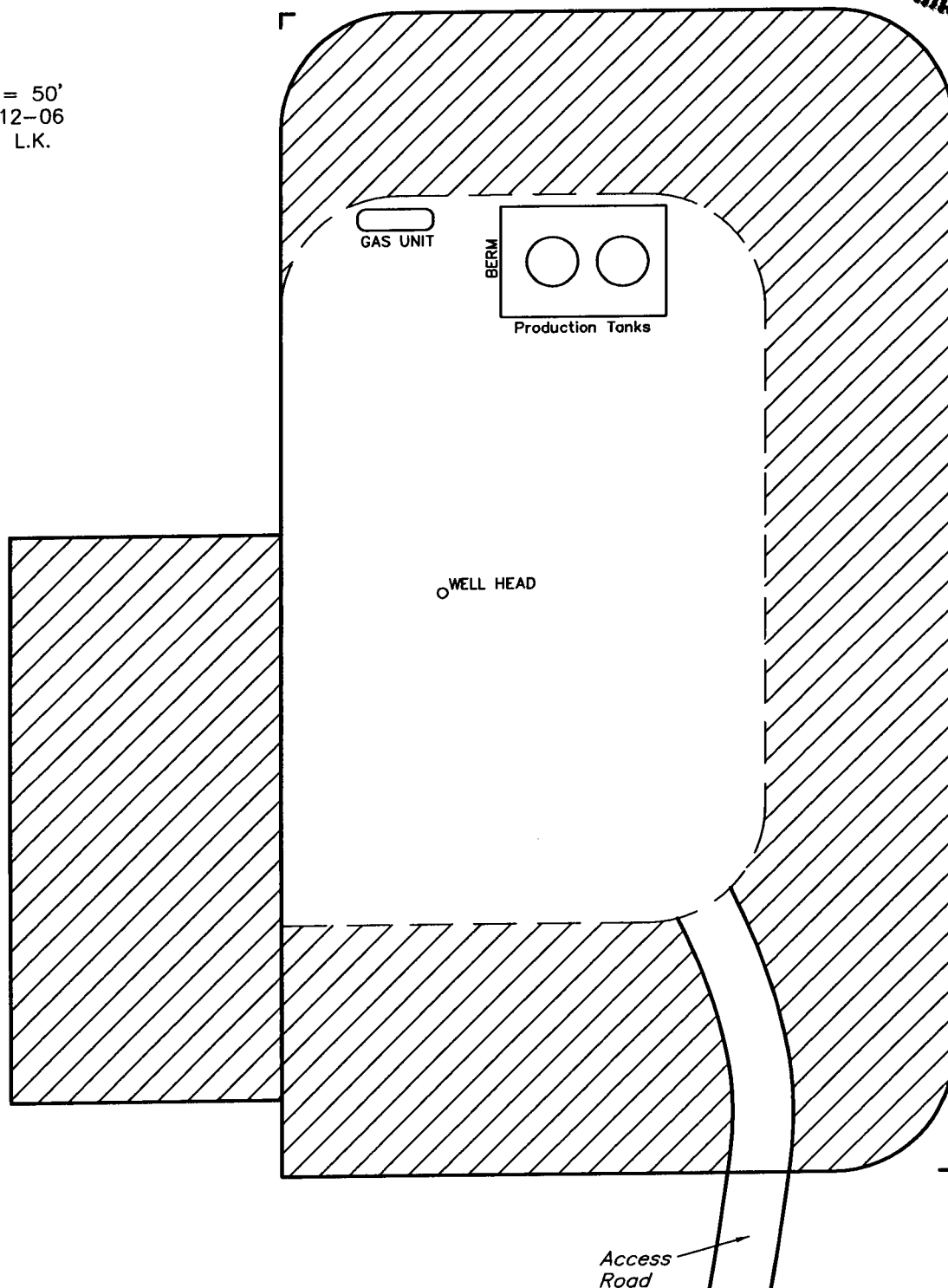
INTERIM RECLAMATION PLAN FOR

GH #7MU-19-8-21  
SECTION 19, T8S, R21E, S.L.B.&M.  
2036' FNL 1790' FEL

FIGURE #3

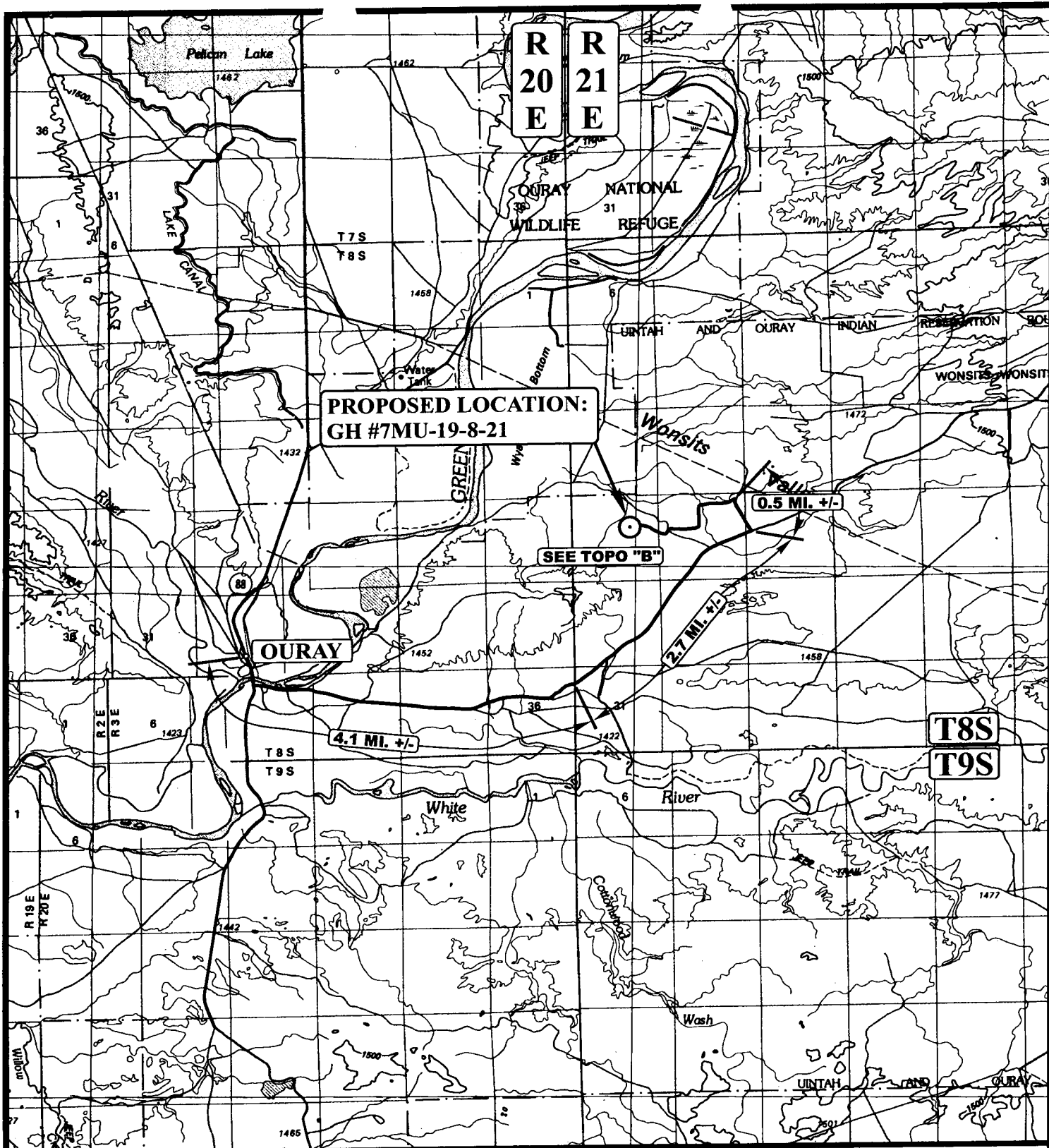


SCALE: 1" = 50'  
DATE: 04-12-06  
Drawn By: L.K.



 INTERIM RECLAMATION

UINTAH ENGINEERING & LAND SURVEYING  
85 So. 200 East \* Vernal, Utah 84078 \* (435) 789-1017



# LEGEND:

○ PROPOSED LOCATION

## QUESTAR EXPLR. & PROD.

GH #7MU-19-8-21  
SECTION 19, T8S, R21E, S.L.B.&M.  
2036' FNL 1790' FEL



Uintah Engineering & Land Surveying  
85 South 200 East Vernal, Utah 84078  
(435) 789-1017 \* FAX (435) 789-1813



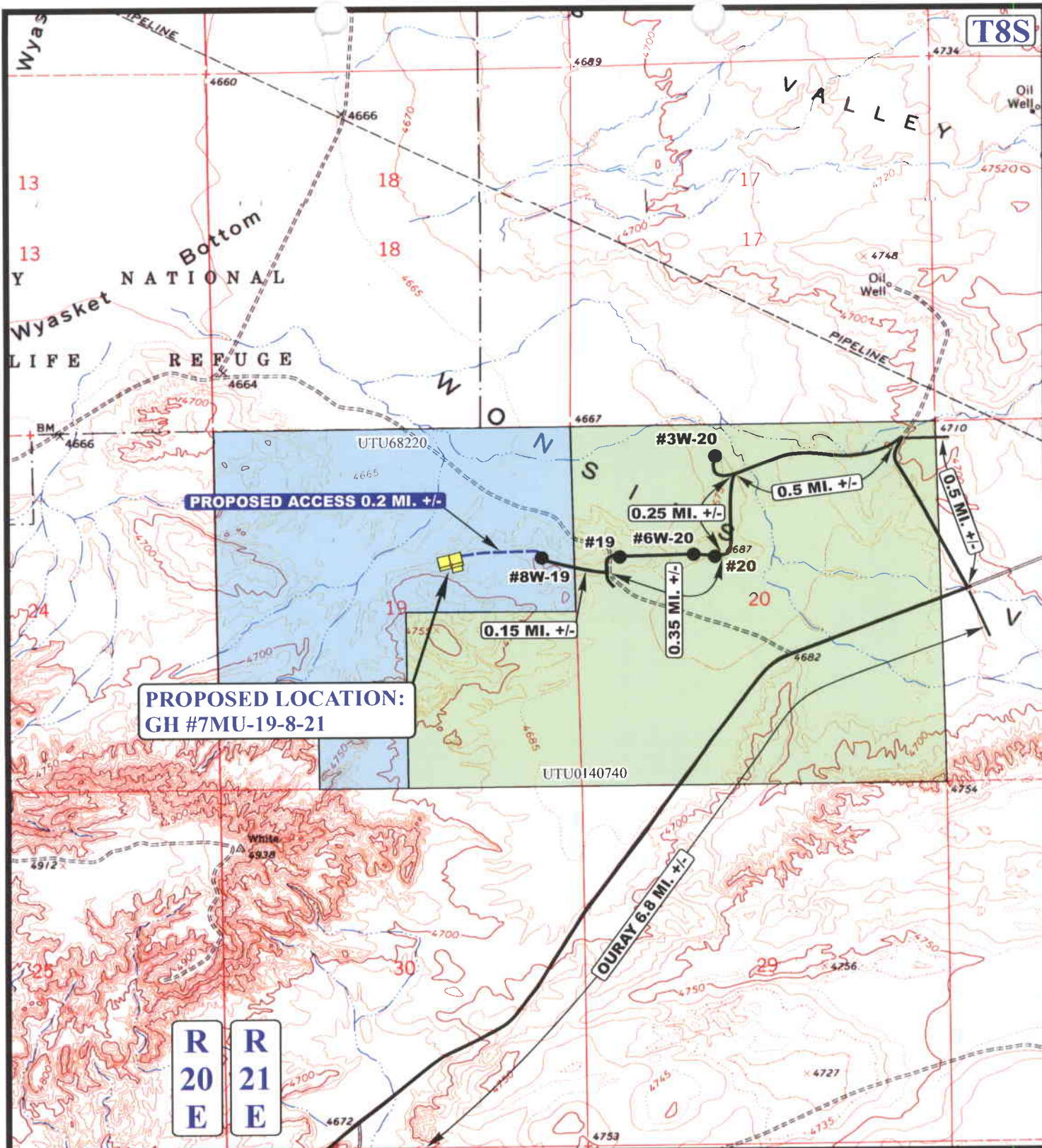
TOPOGRAPHIC  
MAP

04 10 06  
MONTH DAY YEAR

SCALE: 1:100,000 DRAWN BY: LDK REVISED: 00-00-00







EXISTING ROAD  
PROPOSED ACCESS ROAD



**UEIS** Utah Engineering & Land Surveying  
85 South 200 East Vernal, Utah 84078  
(435) 789-1017 \* FAX (435) 789-1813

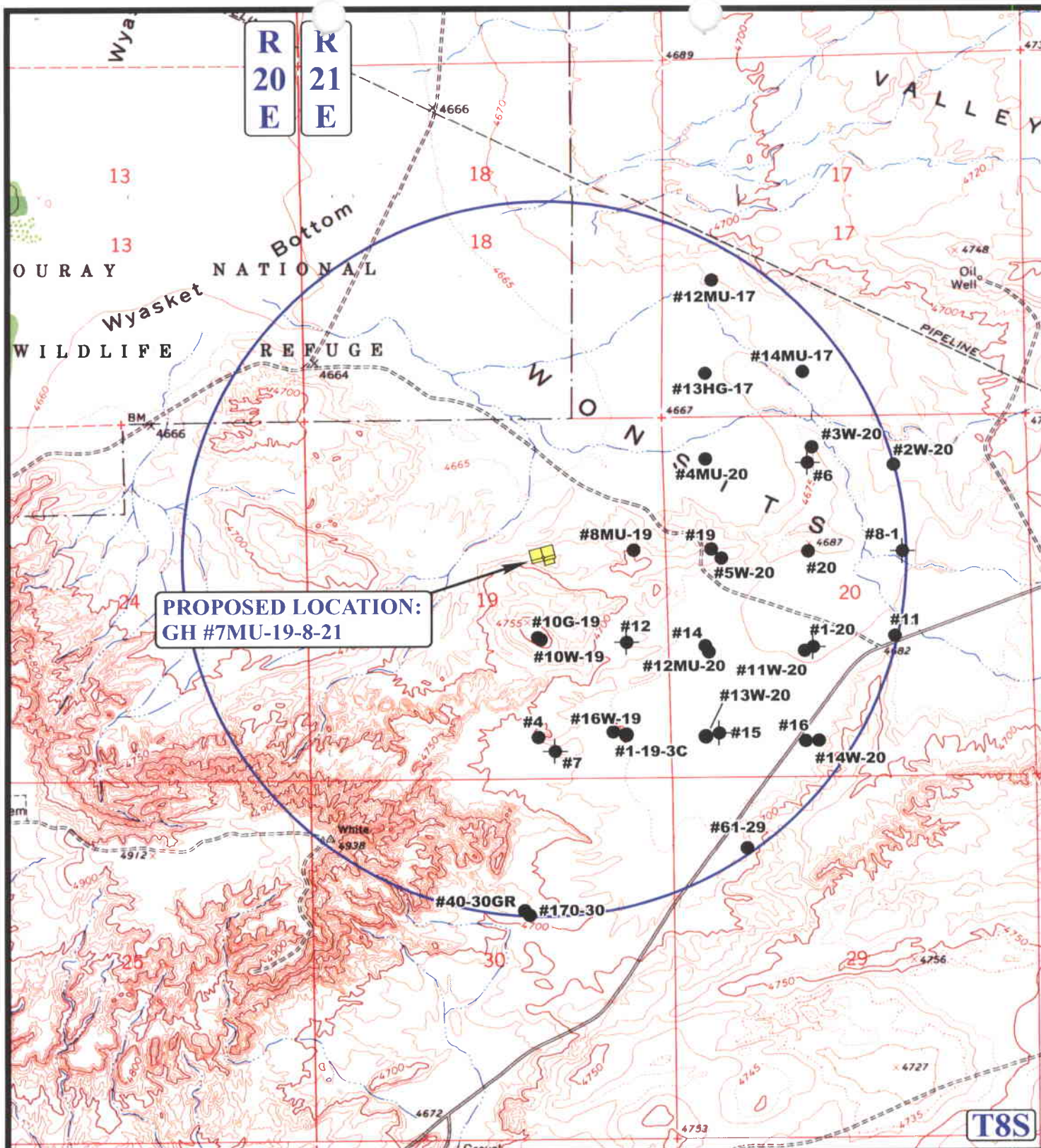
**TOPOGRAPHIC MAP**

04 10 06  
MONTH DAY YEAR

SCALE: 1" = 2000' DRAWN BY: LDK REVISED: 00-00-00

**B**  
TOPO





# LEGEND:

- DISPOSAL WELLS
- PRODUCING WELLS
- SHUT IN WELLS
- WATER WELLS
- ABANDONED WELLS
- TEMPORARILY ABANDONED

## QUESTAR EXPLR. & PROD.

GH #7MU-19-8-21  
SECTION 19, T8S, R21E, S.L.B.&M.  
2036' FNL 1790' FEL



Utah Engineering & Land Surveying  
85 South 200 East Vernal, Utah 84078  
(435) 789-1017 \* FAX (435) 789-1813



TOPOGRAPHIC  
MAP

04 10 06  
MONTH DAY YEAR

SCALE: 1" = 2000' DRAWN BY: LDK REVISED: 00-00-00





T8S

U G E

4664

4667

UTU68220

4665

PROPOSED LOCATION:  
GH #7MU-19-8-21

PROPOSED ACCESS ROAD

#3W-20

4675

#19

#8W-19

#6W-20

PROPOSED PIPELINE

TIE-IN POINT

EXISTING PIPELINE

19

4755

4700

4685

UTU0140740

R  
21  
E

White  
938

APPROXIMATE TOTAL PIPELINE DISTANCE = 1,190' +/-

LEGEND:

- PROPOSED ACCESS ROAD
- EXISTING PIPELINE
- PROPOSED PIPELINE

QUESTAR EXPLR. & PROD.

GH #7MU-19-8-21  
SECTION 19, T8S, R21E, S.L.B.&M.  
2036' FNL 1790' FEL



Uintah Engineering & Land Surveying  
85 South 200 East Vernal, Utah 84078  
(435) 789-1017 \* FAX (435) 789-1813



TOPOGRAPHIC  
MAP

04 10 06  
MONTH DAY YEAR

SCALE: 1" = 1000' DRAWN BY: LDK REVISED: 00-00-00

D  
TOPO



**WORKSHEET**  
**APPLICATION FOR PERMIT TO DRILL**

APD RECEIVED: 06/12/2006

API NO. ASSIGNED: 43-047-38267

WELL NAME: GH 7MU-19-8-21

OPERATOR: QEP UINTA BASIN, INC. ( N2460 )

CONTACT: JAN NELSON

PHONE NUMBER: 435-781-4331

PROPOSED LOCATION:

SWNE 19 080S 210E

SURFACE: 2036 FNL 1790 FEL

BOTTOM: 2036 FNL 1790 FEL

COUNTY: UINTAH

LATITUDE: 40.11019 LONGITUDE: -109.5936

UTM SURF EASTINGS: 619859 NORTHINGS: 4440725

FIELD NAME: UNDESIGNATED ( 2 )

INSPECT LOCATN BY: / /

Tech Review	Initials	Date
Engineering		
Geology		
Surface		

LEASE TYPE: 1 - Federal

LEASE NUMBER: UTU-68220

SURFACE OWNER: 2 - Indian

PROPOSED FORMATION: MVRD

COALBED METHANE WELL? NO

RECEIVED AND/OR REVIEWED:

☒ Plat  
☒ Bond: Fed[1] Ind[] Sta[] Fee[]  
(No. ESB000024 )  
☒ Potash (Y/N)  
☒ Oil Shale 190-5 (B) or 190-3 or 190-13  
☒ Water Permit  
(No. 49-2153 )  
☒ RDCC Review (Y/N)  
(Date: )  
☒ Fee Surf Agreement (Y/N)  
☒ Intent to Commingle (Y/N)

LOCATION AND SITING:

☐ R649-2-3.  
Unit: \_\_\_\_\_  
☒ R649-3-2. General  
Siting: 460 From Qtr/Qtr & 920' Between Wells  
☐ R649-3-3. Exception  
☐ Drilling Unit  
Board Cause No: \_\_\_\_\_  
Eff Date: \_\_\_\_\_  
Siting: \_\_\_\_\_  
☐ R649-3-11. Directional Drill

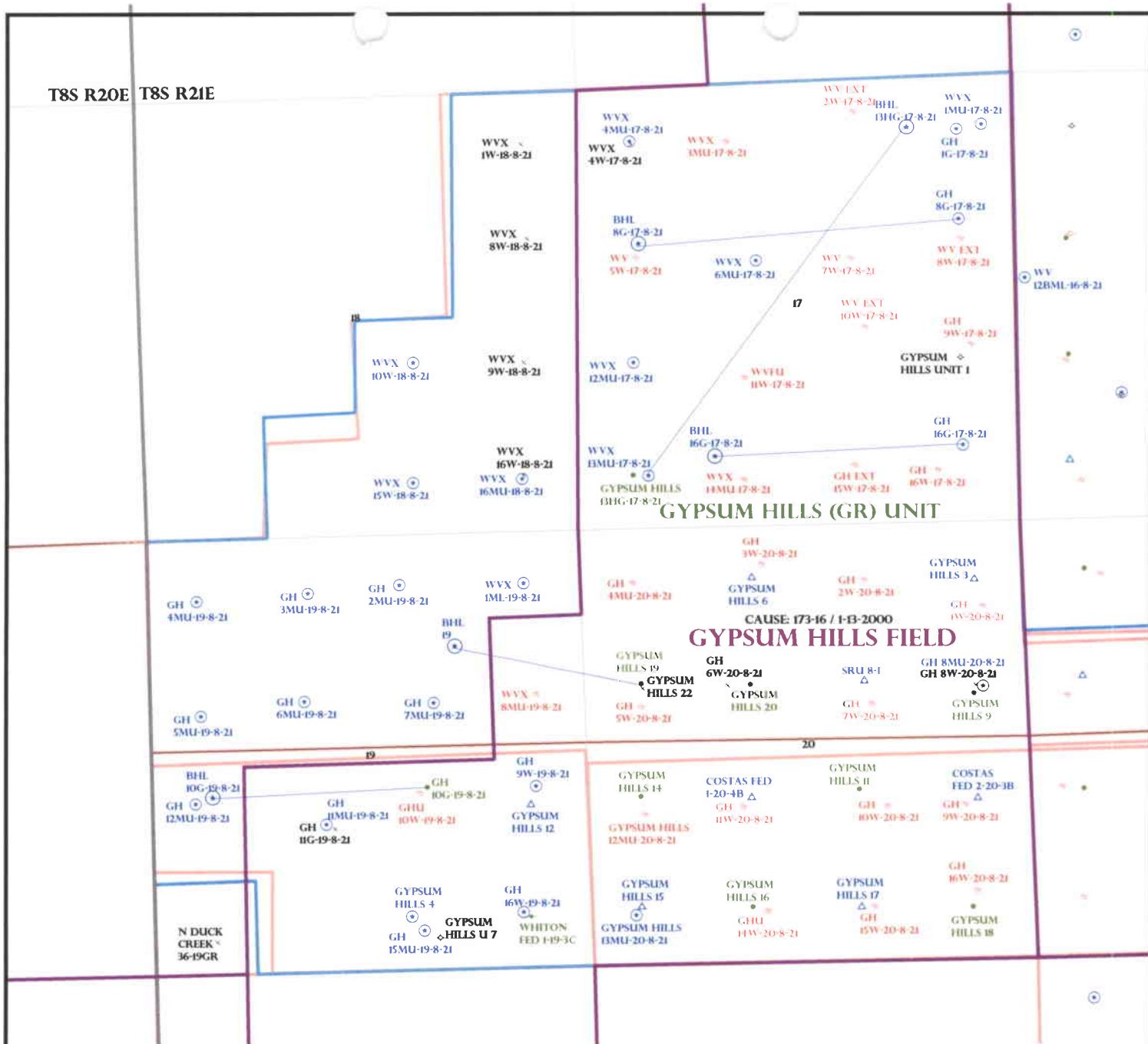
COMMENTS:

*See Separate Blk*

STIPULATIONS:

*1. Federal Approval  
2. Spacing Strip*

T8S R20E T8S R21E



OPERATOR: QEP UINTA BASIN (N2460)

SEC: 18,19 T. 8S R. 21E

FIELD: UNDESIGNATED (002)

COUNTY: UTAH

SPACING: R649-3-2 / GENERAL SITING

**Field Status**

- ABANDONED
- ACTIVE
- COMBINED
- INACTIVE
- PROPOSED
- STORAGE
- TERMINATED

**Unit Status**

- EXPLORATORY
- GAS STORAGE
- NF PP OIL
- NF SECONDARY
- PENDING
- PI OIL
- PP GAS
- PP GEOTHERML
- PP OIL
- SECONDARY
- TERMINATED

**Wells Status**

- GAS INJECTION
- GAS STORAGE
- LOCATION ABANDONED
- NEW LOCATION
- PLUGGED & ABANDONED
- PRODUCING GAS
- PRODUCING OIL
- SHUT-IN GAS
- SHUT-IN OIL
- TEMP. ABANDONED
- TEST WELL
- WATER INJECTION
- WATER SUPPLY
- WATER DISPOSAL
- DRILLING



PREPARED BY: DIANA WHITNEY  
DATE: 15-JUNE-2006



## State of Utah

### Department of Natural Resources

MICHAEL R. STYLER  
*Executive Director*

### Division of Oil, Gas & Mining

JOHN R. BAZA  
*Division Director*

JON M. HUNTSMAN, JR.  
*Governor*

GARY R. HERBERT  
*Lieutenant Governor*

June 15, 2006

QEP Uinta Basin, Inc.  
11002 E 17500 S  
Vernal, UT 84078

Re: GH 7MU-19-8-21 Well, 2036' FNL, 1790' FEL, SW NE, Sec. 19, T. 8 South,  
R. 21 East, Uintah County, Utah

Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann. § 40-6-1 *et seq.*, Utah Administrative Code R649-3-1 *et seq.*, and the attached Conditions of Approval, approval to drill the referenced well is granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-047-38267.

Sincerely,

A handwritten signature in black ink, appearing to read "Gil Hunt".

Gil Hunt  
Associate Director

pab  
Enclosures

cc: Uintah County Assessor  
Bureau of Land Management, Vernal District Office

**Operator:** QEP Uinta Basin, Inc.  
**Well Name & Number** GH 7MU-19-8-21  
**API Number:** 43-047-38267  
**Lease:** UTU-68220

**Location:** SW NE                      **Sec.** 19                      **T.** 8 South                      **R.** 21 East

### **Conditions of Approval**

1. General

Compliance with the requirements of Utah Admin. R. 649-1 *et seq.*, the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

2. Notification Requirements

Notify the Division within 24 hours of spudding the well.

- Contact Carol Daniels at (801) 538-5284.

Notify the Division prior to commencing operations to plug and abandon the well.

- Contact Dan Jarvis at (801) 538-5338

3. Reporting Requirements

All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

4. State approval of this well does not supersede the required federal approval, which must be obtained prior to drilling.

5. This proposed well is located in an area for which drilling units (well spacing patterns) have not been established through an order of the Board of Oil, Gas and Mining (the "Board"). In order to avoid the possibility of waste or injury to correlative rights, the operator is requested, once the well has been drilled, completed, and has produced, to analyze geological and engineering data generated therefrom, as well as any similar data from surrounding areas if available. As soon as is practicable after completion of its analysis, and if the analysis suggests an area larger than the quarter-quarter section upon which the well is located is being drained, the operator is requested to seek an appropriate order from the Board establishing drilling and spacing units in conformance with such analysis by filing a Request for Agency Action with the Board.

**Division of Oil, Gas and Mining**  
**OPERATOR CHANGE WORKSHEET**

**ROUTING**

1. DJJ  
 2. CDW

**Change of Operator (Well Sold)**

**X - Operator Name Change/Merger**

The operator of the well(s) listed below has changed, effective:

**1/1/2007**

<b>FROM: (Old Operator):</b> N2460-QEP Uinta Basin, Inc. 1050 17th St, Suite 500 Denver, CO 80265  Phone: 1 (303) 672-6900	<b>TO: ( New Operator):</b> N5085-Questar E&P Company 1050 17th St, Suite 500 Denver, CO 80265  Phone: 1 (303) 672-6900
---	--

CA No.				Unit:		GYPSUM HILLS UNIT		
WELL NAME	SEC TWN RNG			API NO	ENTITY NO	LEASE TYPE	WELL TYPE	WELL STATUS
SEE ATTACHED LISTS				*				

**OPERATOR CHANGES DOCUMENTATION**

Enter date after each listed item is completed

- (R649-8-10) Sundry or legal documentation was received from the **FORMER** operator on: 4/19/2007
- (R649-8-10) Sundry or legal documentation was received from the **NEW** operator on: 4/16/2007
- The new company was checked on the **Department of Commerce, Division of Corporations Database** on: 1/31/2005
- Is the new operator registered in the State of Utah: \_\_\_\_\_ Business Number: 764611-0143
- (R649-9-2) Waste Management Plan has been received on: IN PLACE
- Inspections of LA PA state/fee well sites complete on: n/a
- Reports current for Production/Disposition & Sundries on: n/a
- Federal and Indian Lease Wells:** The BLM and or the BIA has approved the merger, name change, or operator change for all wells listed on Federal or Indian leases on: BLM 4/23/2007 BIA
- Federal and Indian Units:**  
The BLM or BIA has approved the successor of unit operator for wells listed on: 4/23/2007
- Federal and Indian Communization Agreements ("CA"):**  
The BLM or BIA has approved the operator for all wells listed within a CA on: \_\_\_\_\_
- Underground Injection Control ("UIC")** The Division has approved UIC Form 5, **Transfer of Authority to Inject**, for the enhanced/secondary recovery unit/project for the water disposal well(s) listed on: \_\_\_\_\_

**DATA ENTRY:**

- Changes entered in the **Oil and Gas Database** on: 4/30/2007 and 5/15/2007
- Changes have been entered on the **Monthly Operator Change Spread Sheet** on: 4/30/2007 and 5/15/2007
- Bond information entered in RBDMS on: 4/30/2007 and 5/15/2007
- Fee/State wells attached to bond in RBDMS on: 4/30/2007 and 5/15/2007
- Injection Projects to new operator in RBDMS on: 4/30/2007 and 5/15/2007
- Receipt of Acceptance of Drilling Procedures for APD/New on: n/a

**BOND VERIFICATION:**

- Federal well(s) covered by Bond Number: ESB000024
- Indian well(s) covered by Bond Number: 799446
- (R649-3-1) The **NEW** operator of any state/fee well(s) listed covered by Bond Number 965003033
- The **FORMER** operator has requested a release of liability from their bond on: n/a

**LEASE INTEREST OWNER NOTIFICATION:**

- (R649-2-10) The **NEW** operator of the fee wells has been contacted and informed by a letter from the Division of their responsibility to notify all interest owners of this change on: n/a

**COMMENTS: THIS IS A COMPANY NAME CHANGE.**

**SOME WELL NAMES HAVE BEEN CHANGED AS REQUESTED**

Original Well Name	Well Name & No.	Q/Q	SEC	TWP	RNG	API	Entity	Lease	Well Type	Status
GYPSUM HILLS 3	GH 3	NENE	20	080S	210E	4304720002	5355	Federal	WI	A
GYPSUM HILLS 4	GH 4	SWSE	19	080S	210E	4304730028	5355	Federal	OW	P
GYPSUM HILLS 6	GH 6	NENW	20	080S	210E	4304730099	5251	Federal	WI	A
COSTAS FED 1-20-4B	GH 1-20	NESW	20	080S	210E	4304731006	5355	Federal	WI	A
WHITON FED 1-19-3C	GH 1-19	SESE	19	080S	210E	4304731065	5355	Federal	OW	P
COSTAS FED 2-20-3B	GH 2-20	NESE	20	080S	210E	4304731066	5355	Federal	WI	A
STAGECOACH FED 23-21	GH 23-21	NWSW	21	080S	210E	4304731541	5355	Federal	OW	P
COSTAS FED 3-21-1D	GH 3-21	SWNW	21	080S	210E	4304731604	5355	Federal	WI	A
COSTAS FED 4-21-1C	GH 4-21	SENE	21	080S	210E	4304731826	5355	Federal	OW	P
COSTAS FED 5-21-2C	GH 5-21	SENE	21	080S	210E	4304731827	5355	Federal	OW	P
SRU 8-I	GH 8-I	SWNE	20	080S	210E	4304731932	5355	Federal	WI	A
GYPSUM HILLS 9	GH 9	SENE	20	080S	210E	4304732304	5355	Federal	OW	P
GYPSUM HILLS 10	GH 10	NWSE	21	080S	210E	4304732306	5355	Federal	WI	A
GYPSUM HILLS 12	GH 12	NESE	19	080S	210E	4304732458	5355	Federal	WI	A
GYPSUM HILLS 11	GH 11	NWSE	20	080S	210E	4304732459	5355	Federal	OW	P
GYPSUM HILLS 13	GH 13	NESW	21	080S	210E	4304732460	5355	Federal	OW	P
GYPSUM HILLS 14	GH 13	NWSW	20	080S	210E	4304732647	5355	Federal	OW	P
GYPSUM HILLS 15	GH 15	SWSW	20	080S	210E	4304732648	5355	Federal	WI	A
GYPSUM HILLS 17	GH 17	SWSE	20	080S	210E	4304732649	5355	Federal	WI	A
GYPSUM HILLS 18	GH 18	SESE	20	080S	210E	4304732650	5355	Federal	OW	P
GYPSUM HILLS 19	GH 19	SWNW	20	080S	210E	4304732651	5355	Federal	OW	P
GYPSUM HILLS 20	GH 20	SENE	20	080S	210E	4304732652	5355	Federal	OW	P
GYPSUM HILLS 16	GH 16	SESW	20	080S	210E	4304732675	5355	Federal	OW	P
GHU 10W-19-8-21	GH 10W-19-8-21	NWSE	19	080S	210E	4304733528	12736	Federal	GW	P
GH 10G-19-8-21	GH 10G-19-8-21	NWSE	19	080S	210E	4304733566	5355	Federal	OW	P
WV 11W-17-8-21	WV 11W-17-8-21	NESW	17	080S	210E	4304733912	13228	Federal	GW	P
WV 5W-17-8-21	WV 5W-17-8-21	SWNW	17	080S	210E	4304733954	13332	Federal	GW	P
WV 7W-17-8-21	WV 7W-17-8-21	SWNE	17	080S	210E	4304733956	13330	Federal	GW	P
GH 9W-17-8-21	GH 9W-17-8-21	NESE	17	080S	210E	4304734150	13392	Federal	GW	P
GH 16W-17-8-21	GH 16W-17-8-21	SESE	17	080S	210E	4304734156	13354	Federal	GW	P
WV EXT 10W-17-8-21	WVX 10W-17-8-20	NWSE	17	080S	210E	4304734561	13744	Federal	GW	P
GH EXT 15W-17-8-21	GHX 15W-17-8-20	SWSE	17	080S	210E	4304734562	13674	Federal	GW	P
GYPSUM HILLS 13HG-17-8-21	GHX 13HG-17-8-21	SWSW	17	080S	210E	4304734723	5355	Federal	OW	S
GH 1G-17-8-21	GH 1G-17-8-21	NENE	17	080S	210E	4304734927	5355	Federal	OW	P
WV EXT 2W-17-8-21	WVX 2W-17-8-20	NWNE	17	080S	210E	4304734928	14253	Federal	GW	P
WV EXT 8W-17-8-21	WVX 8W-17-8-20	SENE	17	080S	210E	4304734929	13792	Federal	GW	P
GH 4MU-20-8-21	GH 4MU-20-8-21	NWNW	20	080S	210E	4304735068	14213	Federal	GW	P
GYPSUM HILLS 13MU-20-8-21	GH 13MU-20-8-20	SWSW	20	080S	210E	4304735070	14817	Federal	GW	P
GH 5W-20-8-21	GH 5W-20-8-21	SWNW	20	080S	210E	4304735097	14557	Federal	GW	P
WVX 3MU-17-8-21	WVX 3MU-17-8-21	NENW	17	080S	210E	4304735318	14113	Federal	GW	P
GH 15ML-18-8-21	GH 15ML-18-8-21	SWSE	18	080S	210E	4304735323	15483	Federal	GW	DRL



QEP Uinta Basin (N2460) to QUESTAR E and P (N5085)  
GYPSUM HILLS UNIT

4/30/2007 and 5/15/2007

Original Well Name	Well Name & No.	Q/Q	SEC	TWP	RNG	API	Entity	Lease	Well Type	Status
GH 1ML-19-8-21	GH 1ML-19-8-21	NENE	19	080S	210E	4304735324	14824	Federal	GW	P
GH 16W-19-8-21	GH 16W-19-8-21	SESE	19	080S	210E	4304735325	14823	Federal	GW	DRL
WVX 14MU-17-8-21	WVX 14MU-17-8-21	SESW	17	080S	210E	4304735369	14098	Federal	GW	P
WVX 12MU-17-8-21	WVX 12MU-17-8-21	NWSW	17	080S	210E	4304735370	15108	Federal	GW	P
WVX 8MU-19-8-21	WVX 8MU-19-8-21	SENE	19	080S	210E	4304735372	14241	Federal	GW	P
GH 10ML-18-8-21	GH 10ML-18-8-21	NWSE	18	080S	210E	4304735391	15482	Federal	GW	P
GH 8G-17-8-21	GH 8G-17-8-21	SENE	17	080S	210E	4304737992	5355	Federal	OW	DRL
GH 16G-17-8-21	GH 16G-17-8-21	SESE	17	080S	210E	4304737993	5355	Federal	OW	DRL
WVX 1MU-17-8-21	WVX 1MU-17-8-21	NENE	17	080S	210E	4304738156		Federal	GW	APD
GH 8MU-20-8-21	GH 8-20-8-21	SENE	20	080S	210E	4304738157		Federal	GW	APD
WVX 13MU-17-8-21	WVX 13MU-17-8-21	SWSW	17	080S	210E	4304738188		Federal	GW	APD
WVX 6MU-17-8-21	WVX 6MU-17-8-21	SENE	17	080S	210E	4304738189		Federal	GW	APD
WVX 4MU-17-8-21	WVX 4MU-17-8-21	NWNW	17	080S	210E	4304738190		Federal	GW	APD
WVX 16MU-18-8-21	WVX 16MU-18-8-21	SESE	18	080S	210E	4304738191		Federal	GW	APD
GH 2MU-19-8-21	GH 2MU-19-8-21	NWNE	19	080S	210E	4304738192		Federal	GW	APD
GH 3MU-19-8-21	GH 3MU-19-8-21	NENW	19	080S	210E	4304738250		Federal	GW	APD
GH 4MU-19-8-21	GH 4MU-19-8-21	NWNW	19	080S	210E	4304738264		Federal	GW	APD
GH 5MU-19-8-21	GH 5MU-19-8-21	SWNW	19	080S	210E	4304738265		Federal	GW	APD
GH 6MU-19-8-21	GH 6MU-19-8-21	SENE	19	080S	210E	4304738266		Federal	GW	APD
GH 7MU-19-8-21	GH 7D-19-8-21	SWNE	19	080S	210E	4304738267		Federal	GW	APD
GH 11MU-19-8-21	GH 11MU-19-8-21	NESW	19	080S	210E	4304738268		Federal	GW	APD
GH 12MU-19-8-21	GH 12MU-19-8-21	NWSW	19	080S	210E	4304738269		Federal	GW	APD
GH 15MU-19-8-21	GH 15MU-19-8-21	SWSE	19	080S	210E	4304738270		Federal	GW	APD
GH 14MU-19-8-21	GH 14MU-19-8-21	SESW	19	080S	210E	4304738472		Federal	GW	APD
WVX 1MU-18-8-21	WVX 1MU-18-8-21	NENE	18	080S	210E	4304738659		Federal	GW	APD
WVX 9MU-18-8-21	WVX 9MU-18-8-21	NESE	18	080S	210E	4304738660		Federal	GW	APD
WVX 8MU-18-8-21	GH 8G-18-8-21	SENE	18	080S	210E	4304738661		Federal	GW	APD
GH 6MU-20-8-21	GH 6-20-8-21	SENE	20	080S	210E	4304738662		Federal	GW	APD

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

1. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER _____		5. LEASE DESIGNATION AND SERIAL NUMBER: see attached
2. NAME OF OPERATOR: QUESTAR EXPLORATION AND PRODUCTION COMPANY		6. IF INDIAN, ALLOTTEE OR TRIBE NAME: see attached
3. ADDRESS OF OPERATOR: 1050 17th Street Suite 500 CITY Denver STATE CO ZIP 80265		7. UNIT or CA AGREEMENT NAME: see attached
4. LOCATION OF WELL FOOTAGES AT SURFACE: attached		8. WELL NAME and NUMBER: see attached
PHONE NUMBER: (303) 308-3068		9. API NUMBER: attached
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:		10. FIELD AND POOL, OR WILDCAT:
COUNTY: Uintah		STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will start: 1/1/2007	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
<input type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion:	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input checked="" type="checkbox"/> OTHER: Operator Name Change
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Effective January 1, 2007 operator of record, QEP Uinta Basin, Inc., will hereafter be known as QUESTAR EXPLORATION AND PRODUCTION COMPANY. This name change involves only an internal corporate name change and no third party change of operator is involved. The same employees will continue to be responsible for operations of the properties described on the attached list. All operations will continue to be covered by bond numbers:

Federal Bond Number: 965002976 (BLM Reference No. ESB000024)

Utah State Bond Number: 965003033

Fee Land Bond Number: 965003033

Current operator of record, QEP UINTA BASIN, INC., hereby resigns as operator of the properties as described on the attached list.

Successor operator of record, QUESTAR EXPLORATION AND PRODUCTION COMPANY, hereby assumes all rights, duties and obligations as operator of the properties as described on the attached list

Jay B. Neese, Executive Vice President, QEP Uinta Basin, Inc.

Jay B. Neese, Executive Vice President  
Questar Exploration and Production Company

NAME (PLEASE PRINT) Debra K. Stanberry TITLE Supervisor, Regulatory Affairs  
SIGNATURE DATE 3/16/2007

(This space for State use only)

RECEIVED

APR 19 2007

DIV. OF OIL, GAS & MINING



STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

FORM 9

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

1. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER _____		5. LEASE DESIGNATION AND SERIAL NUMBER: see attached
2. NAME OF OPERATOR: QUESTAR EXPLORATION AND PRODUCTION COMPANY		6. IF INDIAN, ALLOTTEE OR TRIBE NAME: see attached
3. ADDRESS OF OPERATOR: 1050 17th Street Suite 500 City: Denver STATE: CO ZIP: 80265		7. UNIT or CA AGREEMENT NAME: see attached
PHONE NUMBER: (303) 308-3068		8. WELL NAME and NUMBER: see attached
4. LOCATION OF WELL FOOTAGES AT SURFACE: attached		9. API NUMBER: attached
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:		10. FIELD AND POOL, OR WILDCAT:
COUNTY: Uintah		STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will start: <u>1/1/2007</u>	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
<input type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion:	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input checked="" type="checkbox"/> OTHER: <u>Well Name Changes</u>
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

PER THE ATTACHED LIST OF WELLS, QUESTAR EXPLORATION AND PRODUCTION COMPANY REQUESTS THAT THE INDIVIDUAL WELL NAMES BE UPDATED IN YOUR RECORDS.

NAME (PLEASE PRINT) Debra K. Stanberry TITLE Supervisor, Regulatory Affairs  
SIGNATURE [Signature] DATE 4/17/2007

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APR 19 2007

DIV. OF OIL, GAS & MINING



# United States Department of the Interior

## BUREAU OF LAND MANAGEMENT

Utah State Office  
P.O. Box 45155  
Salt Lake City, UT 84145-0155



IN REPLY REFER TO  
3180  
UT-922

April 23, 2007

Questar Exploration and Production Company  
1050 17th Street, Suite 500  
Denver, Colorado 80265

Re: Gypsum Hills (GR) Unit  
Uintah County, Utah

Gentlemen:

On April 12, 2007, we received an indenture dated April 6, 2007, whereby QEP Uinta Basin, Inc. resigned as Unit Operator and Questar Exploration and Production Company was designated as Successor Unit Operator for the Gypsum Hills (GR) Unit, Uintah County, Utah.

This indenture was executed by all required parties and the signatory parties have complied with Sections 5 and 6 of the unit agreement. The instrument is hereby approved effective April 23, 2007. In approving this designation, the Authorized Officer neither warrants nor certifies that the designated party has obtained all required approval that would entitle it to conduct operations under the Gypsum Hills (GR) Unit Agreement.

Your nationwide oil and gas bond No. ESB000024 will be used to cover all federal operations within the Gypsum Hills (GR) Unit.

It is requested that you notify all interested parties of the change in unit operator. Copies of the approved instruments are being distributed to the appropriate federal offices, with one copy returned herewith.

Sincerely,

/s/ Greg J. Noble

Greg J. Noble  
Acting Chief, Branch of Fluid Minerals

### Enclosure

bcc: Field Manager - Vernal (w/enclosure)  
SITLA  
Division of Oil, Gas & Mining  
File - Gypsum Hills (GR) Unit (w/enclosure)  
Agr. Sec. Chron  
Reading File  
Central Files

UT922:TAThompson:tt:4/23/07

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APR 30 2007

DIV. OF OIL, GAS & MINING

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

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JUN 06 2006

FORM APPROVED  
OMB NO. 1040-0136  
Expires: February 28, 1995

## APPLICATION FOR PERMIT TO DRILL OR DEEPEN

TYPE OF WORK

DRILL ☒DEEPEN ☐

TYPE OF WELL

☐☒☐

SINGLE

☒

MULTIPLE

☐

OIL WELL

GAS WELL

OTHER

ZONE

ZONE

2. NAME OF OPERATOR

QEP UINTA BASIN, INC.

Contact: Jan Nelson

E-Mail: jan.nelson@questar.com

3. ADDRESS

11002 E. 17500 S. Vernal, Ut 84078

Telephone number

Phone 435-781-4331 Fax 435-781-4323

4. LOCATION OF WELL (Report location clearly and in accordance with and State requirements\*)

At Surface

2036' FNL 1790' FEL SWNE SECTION 19, T8S, R21E

At proposed production zone

14. DISTANCE IN MILES FROM NEAREST TOWN OR POSTOFFICE\*

7 +/- MILES EAST OF OURAY, UTAH

15. DISTANCE FROM PROPOSED LOCATION TO NEAREST  
PROPERTY OR LEASE LINE, FT.

(also to nearest drig, unit line if any)

1790' +/-

16. NO. OF ACRES IN LEASE

440.00

18. DISTANCE FROM PROPOSED location to nearest well, drilling,  
completed, applied for, on this lease, ft

19. PROPOSED DEPTH

11,825'

21. ELEVATIONS (Show whether DF, RT, GR, ect.)

4677.0' GR

22. DATE WORK WILL START

ASAP

9. API NUMBER:

43-047-38267

10. FIELD AND POOL, OR WILDCAT

GYPSUM HILLS

11. SEC., T, R, M, OR BLK &amp; SURVEY OR AREA

SEC. 19, T8S, R21E Mer SLB

12. COUNTY OR PARISH

Utah

13. STATE

UT

17. NO. OF ACRES ASSIGNED TO THIS WELL

40

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

1. Well plat certified by a registered surveyor.

2. A Drilling Plan

3. A surface Use Plan (if location is on National Forest System Land)

4. Bond to cover the operations unless covered by an existing bond on file (see  
Item 20 above).

5. Operator certification.

6. Such other site specific information and/or plans as may be required by the  
authorized officer.Accepted by the  
Utah Division of  
Oil, Gas and Mining  
FOR RECORD ONLY

SIGNED

Name (printed/typed) Jan Nelson

DATE 6-5-06

TITLE

Regulatory Affairs

(This space for Federal or State office use)

RECEIVED

PERMIT NO.

APPROVAL DATE

JAN 30 2007

CONDITIONS OF APPROVAL, IF ANY:

APPROVED BY

TITLE

Assistant Field Manager  
Lands & Mineral Resources

DIV. OF OIL, GAS &amp; MINING

DATE

1-18-2007

\*See Instructions On Reverse Side

Title 18 U.S.C Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the

United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction

CONDITIONS OF APPROVAL ATTACHED

UDOGM

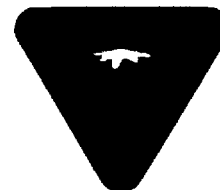
NOTICE OF APPROVAL

07BM4574A



UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
VERNAL FIELD OFFICE

170 South 500 East VERNAL, UT 84078 (435) 781-4400



**CONDITIONS OF APPROVAL FOR APPLICATION FOR PERMIT TO DRILL**

Company: QEP Uinta Basin Inc.  
Well No: GH 7MU-19-8-21  
API No: 43-047-38267

Location: SENE, Sec 19, T8S, R21E  
Lease No: UTU-68220  
Agreement: N/A

Petroleum Engineer:	Ryan Angus	Office: 435-781-4430	Cell: 435-828-
Petroleum Engineer:	James Ashley	Office: 435-781-4470	Cell: 435-828-7874
Petroleum Engineer:	Matt Baker	Office: 435-781-4490	Cell: 435-828-4470
Petroleum Engineer:	Michael Lee	Office: 435-781-4432	
Supervisory Petroleum Technician:	Jamie Sparger	Office: 435-781-4502	Cell: 435-828-3913
NRS/Environmental Scientist:	Scott Ackerman	Office: 435-781-4437	
NRS/Environmental Scientist:	Paul Buhler	Office: 435-781-4475	Cell: 435-828-4029
NRS/Environmental Scientist:	Jannice Cutler	Office: 435-781-3400	
NRS/Environmental Scientist:	Michael Cutler	Office: 435-781-3401	
NRS/Environmental Scientist:	Anna Figueroa	Office: 435-781-3407	
NRS/Environmental Scientist:	Melissa Hawk	Office: 435-781-4476	
NRS/Environmental Scientist:	Chuck McDonald	Office: 435-781-4441	
NRS/Environmental Scientist:	Nathan Packer	Office: 435-781-3405	
NRS/Environmental Scientist:	Verlyn Pindell	Office: 435-781-3402	
NRS/Environmental Scientist:	Holly Villa	Office: 435-781-4404	
NRS/Environmental Scientist:	Darren Williams	Office: 435-781-4447	
NRS/Environmental Scientist:	Karl Wright	Office: 435-781-4484	
After Hours Contact Number: 435-781-4513		Fax: 435-781-4410	

**A COPY OF THESE CONDITIONS SHALL BE FURNISHED TO YOUR  
FIELD REPRESENTATIVE TO INSURE COMPLIANCE**

All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the applicable laws, regulations (43 CFR Part 3160), and this approved Application for Permit to Drill including Surface and Downhole Conditions of Approval. The operator is considered fully responsible for the actions of his subcontractors. A copy of the approved APD must be on location during construction, drilling, and completion operations. **This permit is approved for a one-year period. An additional year extension may be applied for by sundry notice prior to expiration.**

**NOTIFICATION REQUIREMENTS**

Location Construction (Notify NRS)	-	Forty-Eight (48) hours prior to construction of location and access roads.
Location Completion (Notify NRS)	-	Prior to moving on the drilling rig.
Spud Notice (Notify Petroleum Engineer)	-	Twenty-Four (24) hours prior to spudding the well.
Casing String & Cementing (Notify Supervisory Petroleum Technician)	-	Twenty-Four (24) hours prior to running casing and cementing all casing
BOP & Related Equipment Tests (Notify Supervisory Petroleum Technician)	-	Twenty-Four (24) hours prior to initiating pressure tests.
First Production Notice (Notify Petroleum Engineer)	-	Within Five (5) business days after new well begins or production resumes after well has been off production for more than ninety (90) days.

***SURFACE USE PROGRAM  
CONDITIONS OF APPROVAL (COAs)***

**GH 7MU-19-8-21 is located on Tribal Lands. Refer to the enclosed Concurrence Record issued by the Bureau of Indian Affairs.**

## ***DOWNHOLE CONDITIONS OF APPROVAL***

**All provisions outlined in Onshore Oil & Gas Order #2 Drilling Operations shall be strictly adhered to.** The following items are emphasized:

### **SITE SPECIFIC DOWNHOLE CONDITIONS OF APPROVAL**

1. Oil shall not be used in the water based mud system without prior approval. Written request for approval shall be required.
2. Operator shall notify any active gilsonite mining operation within two (2) miles of the location, 48 hours prior to any blasting during construction for this well.
3. Production casing cement shall be brought up and into the surface casing. The minimum cement top is 200 ft above the surface casing shoe.
4. A cement Bond Log (CBL) shall be run from the production casing shoe to the surface casing shoe. A field copy of the CBL shall be submitted to the BLM Vernal Field Office.

### **DRILLING/COMPLETION/PRODUCING OPERATING STANDARDS**

1. There shall be no deviation from the proposed drilling, completion, and/or workover program as approved. Safe drilling and operating practices must be observed. All wells, whether drilling, producing, suspended, or abandoned, shall be identified in accordance with 43 CFR 3162.6. There shall be a sign or marker with the name of the operator, lease serial number, well number, and surveyed description of the well. Any changes in operation must have prior approval from the BLM, Vernal Field Office Petroleum Engineers.
2. The spud date and time shall be reported orally to Vernal Field Office within 24 hours of spudding.
3. **Notify Vernal Field Office Supervisory Petroleum Engineering Technician at least 24 hours in advance of casing cementing operations and BOPE & casing pressure tests.**
4. Blowout prevention equipment (BOPE) shall remain in use until the well is completed or abandoned. Closing unit controls shall remain unobstructed and readily accessible at all times. Choke manifolds shall be located outside of the rig substructure.

All BOPE components shall be inspected daily and those inspections shall be recorded in the daily drilling report. Components shall be operated and tested as required by Onshore Oil & Gas Order No. 2 to insure good mechanical working order. All BOPE pressure tests shall be performed by a test pump with a chart recorder and **NOT** by the rig pumps. Test shall be reported in the driller's log.

BOP drills shall be initially conducted by each drilling crew within 24 hours of drilling out from under the surface casing and weekly thereafter as specified in Onshore Oil & Gas Order No. 2.

Casing pressure tests are required before drilling out from under all casing strings set and cemented in place.

No aggressive/fresh hard-banded drill pipe shall be used within casing.

5. The lessee/operator must report all shows of water or water-bearing sands to the BLM. If flowing water is encountered it must be sampled and analyzed (a copy of the analyses to be submitted to the BLM Field Office in Vernal, Utah).
6. All oil and gas shows shall be adequately tested for commercial possibilities, reported, and protected.
7. The lessee/operator must report encounters of all non oil & gas mineral resources (such as gilsonite, tar sands, oil shale, etc.) to Peter Sokolosky or another geologist of the Vernal Field Office in writing within 5 working days of each encounter. Each report shall include the well name/number, well location, date and depth (from KB or GL) of encounter, vertical footage of the encounter and, the name of the person making the report (along with a telephone number) should the BLM need to obtain additional information.
8. No location shall be constructed or moved, no well shall be plugged, and no drilling or workover equipment shall be removed from a well to be placed in a suspended status without prior approval of the BLM, Vernal Field Office. If operations are to be suspended for more than 30 days, prior approval of the BLM, Vernal Field Office shall be obtained and notification given before resumption of operations.
9. Chronologic drilling progress reports shall be filed directly with the BLM, Vernal Field Office on a weekly basis in sundry, letter format or e-mail to the Petroleum Engineers until the well is completed.

Any change in the program shall be approved by the BLM, Vernal Field Office. "Sundry Notices and Reports on Wells" (Form BLM 3160-5) shall be filed for all changes of plans and other operations in accordance with 43 CFR 3162.3-2.

Emergency approval may be obtained orally, but such approval does not waive the written report requirement. Any additional construction, reconstruction, or alterations of facilities, including roads, gathering lines, batteries, etc., which will result in the disturbance of new ground, shall require the filing of a suitable plan pursuant to Onshore Oil & Gas Order No. 1 of 43 CFR 3164.1 and prior approval by the BLM, Vernal Field Office.

In accordance with 43 CFR 3162.4-3, this well shall be reported on the "Monthly Report of Operations" (Oil and Gas Operations Report ((OGOR)) starting with the month in which operations commence and continue each month until the well is physically plugged and abandoned. This report shall be filed in duplicate, directly with the Minerals Management Service, P.O. Box 17110, Denver, Colorado 80217-0110, or call 1-800-525-7922 (303) 231-3650 for reporting information.

10. Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (BLM Form 3160-4) shall be submitted not later than 30 days

after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3162.4-1. Two copies of all logs run, core descriptions, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, shall be filed on BLM Form 3160-4. Submit with the well completion report a geologic report including, at a minimum, formation tops, and a summary and conclusions. Also include deviation surveys, sample descriptions, strip logs, core data, drill stem test data, and results of production tests if performed. Samples (cuttings, fluid, and/or gas) shall be submitted only when requested by the BLM, Vernal Field Office.

A cement bond log (CBL) will be run from the production casing shoe to the surface casing shoe and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.

**Please submit an electronic copy of all other logs run on this well in LAS format to UT\_VN\_Wellogs@BLM.gov. This submission will supersede the requirement for submittal of paper logs to the BLM.**

11. All off-lease storage, off-lease measurement, or commingling on-lease or off-lease shall have prior written approval from the BLM, Vernal Field Office.

All measurement points shall be identified as point of sales or allocation for royalty determination prior to the installation of facilities.

12. Oil and gas meters shall be calibrated in place prior to any deliveries. The Field Office Petroleum Engineers will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports shall be submitted to the BLM, Vernal Field Office. All measurement facilities will conform to the API standards for liquid hydrocarbons and the AGA standards for natural gas measurement.
13. A schematic facilities diagram as required by Onshore Oil & Gas Order No. 3 shall be submitted to the BLM, Vernal Field Office within 30 days of installation or first production, whichever occurs first. All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with Onshore Oil & Gas Order No. 3.
14. This APD is approved subject to the requirement that, should the well be successfully completed for production, the BLM, Vernal Field office must be notified when it is placed in a producing status. Such notification will be by written communication and must be received in this office by not later than the fifth business day following the date on which the well is placed on production. The notification shall provide, as a minimum, the following informational items:
  - a. Operator name, address, and telephone number.
  - b. Well name and number.
  - c. Well location (¼¼, Sec., Twn, Rng, and P.M.).



- d. Date well was placed in a producing status (date of first production for which royalty will be paid).
  - e. The nature of the well's production, (i.e., crude oil, or crude oil and casing head gas, or natural gas and entrained liquid hydrocarbons).
  - f. The Federal or Indian lease prefix and number on which the well is located; otherwise the non-Federal or non-Indian land category, i.e., State or private.
  - g. Unit agreement and / or participating area name and number, if applicable.
  - h. Communitization agreement number, if applicable.
15. Any venting or flaring of gas shall be done in accordance with Notice to Lessees (NTL) 4A and needs prior approval from Field Office Petroleum Engineers.
16. All undesirable events (fires, accidents, blowouts, spills, discharges) as specified in NTL 3A will be reported to the BLM, Vernal Field Office. Major events as defined in NTL3A, shall be reported verbally within 24 hours, followed by a written report within 15 days. "Other than Major Events" will be reported in writing within 15 days. "Minor Events" will be reported on the Monthly Report of Operations and Production
17. Pursuant to Onshore Oil & Gas Order No. 7, this is authorization for pit disposal of water produced from this well for a period of 90 days from the date of initial production. A permanent disposal method must be approved by this office and in operation prior to the end of this 90-day period. In order to meet this deadline, an application for the proposed permanent disposal method shall be submitted along with any necessary water analyses, as soon as possible, but no later than 45 days after the date of first production. Any method of disposal which has not been approved prior to the end of the authorized 90-day period will be considered as an Incident of Noncompliance and will be grounds for issuing a shut-in order until an acceptable manner for disposing of said water is provided and approved by this office.
18. Unless the plugging is to take place immediately upon receipt of oral approval, the Field Office Petroleum Engineers must be notified at least 24 hours in advance of the plugging of the well, in order that a representative may witness plugging operations. If a well is suspended or abandoned, all pits must be fenced immediately until they are backfilled. The "Subsequent Report of Abandonment" (Form BLM 3160-5) must be submitted within 30 days after the actual plugging of the well bore, showing location of plugs, amount of cement in each, and amount of casing left in hole, and the current status of the surface restoration.

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

CONFIDENTIAL

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

1. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER _____		5. LEASE DESIGNATION AND SERIAL NUMBER: UTU-68220
2. NAME OF OPERATOR: QUESTAR EXPLORATION & PRODUCTION CO.		6. IF INDIAN, ALLOTTEE OR TRIBE NAME: UTE TRIBE
3. ADDRESS OF OPERATOR: 1571 E. 1700 S. CITY VERNAL STATE UT ZIP 84078		7. UNIT or CA AGREEMENT NAME: N/A
PHONE NUMBER: (435) 781-4031		8. WELL NAME and NUMBER: GH 7MU-19-8-21
4. LOCATION OF WELL FOOTAGES AT SURFACE: 2036' FNL 1790' FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SWNE 19 8S 21E		9. API NUMBER: 4304738267
		10. FIELD AND POOL, OR WILDCAT: UNDESIGNATED
		COUNTY: UINTAH
		STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA			
TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will start: _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
<input type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion: _____	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input checked="" type="checkbox"/> OTHER: <u>APD EXTENSION</u>
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

QEP Uinta Basin, Inc. hereby requests a 1 year extension on the GH 7MU-19-8-21.

Approved by the  
Utah Division of  
Oil, Gas and Mining

Date: 06-18-07  
By: [Signature]

6-19-07  
Rm

NAME (PLEASE PRINT) <u>Laura Bills</u>	TITLE <u>Regulatory Affairs</u>
SIGNATURE <u>[Signature]</u>	DATE <u>6/11/2007</u>

(This space for State use only)

RECEIVED  
JUN 13 2007

**Application for Permit to Drill  
Request for Permit Extension  
Validation**

(this form should accompany the Sundry Notice requesting permit extension)

**API:** 43-047-38267  
**Well Name:** GH 7MU-19-8-21  
**Location:** 2036' FNL 1790' FEL, SWNE SEC.19 T8S R21E  
**Company Permit Issued to:** QUESTAR EXPLORATION & PRODUCTION C  
**Date Original Permit Issued:** 6/15/2006

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision.

Following is a checklist of some items related to the application, which should be verified.

If located on private land, has the ownership changed, if so, has the surface agreement been updated? Yes ☐ No ☒

Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location? Yes ☐ No ☒

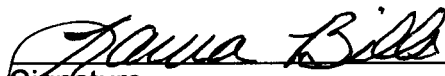
Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well? Yes ☐ No ☒

Have there been any changes to the access route including ownership, or right-of-way, which could affect the proposed location? Yes ☐ No ☒

Has the approved source of water for drilling changed? Yes ☐ No ☒

Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation? Yes ☐ No ☒

Is bonding still in place, which covers this proposed well? Yes ☒ No ☐

  
Signature

6/11/2007  
Date

Title: REGULATORY AFFAIRS

Representing: Questar Exploration & Production Co.

RECEIVED

JUN 13 2007

DIV. OF OIL, GAS & MINING

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

**SUNDRY NOTICES AND REPORTS ON WELLS**

**Do not use this form for proposals to drill or reenter an abandoned well. Use Form 3160-3 (APD) for such proposals.**

FORM APPROVED  
OMB No. 1004-0135  
Expires July 31, 1996

5. Lease Serial No.

UTU 68220

6. If Indian, Allottee or Tribe Name

UTE INDIAN TRIBE

7. If Unit or CA/Agreement, Name and/or No.

GYPSUM HILLS

8. Well Name and No.

GH 7MU-19-8-21

9. API Well No.

43-047-38267

10. Field and Pool, or Exploratory Area

GYPSUM HILLS

11. County or Parish, State

UINTAH

**SUBMIT IN TRIPLICATE - Other Instructions on reverse side**

1. Type of Well

☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator

QUESTAR EXPLORATION & PRODUCTION, CO.

3a. Address

11002 E. 17500 S. VERNAL, UT 84078

3b. Phone No. (include area code)

435-781-4331

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

2036' FNL 1790' FEL SWNE SECTION 19, T8S, R21E

**12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA**

TYPE OF SUBMISSION	TYPE OF ACTION
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize <input type="checkbox"/> Deepen <input type="checkbox"/> Production (Start/Resume) <input type="checkbox"/> Water Shut-Off <input type="checkbox"/> Alter Casing <input type="checkbox"/> Fracture Treat <input type="checkbox"/> Reclamation <input type="checkbox"/> Well Integrity <input type="checkbox"/> Subsequent Report <input type="checkbox"/> Casing Repair <input type="checkbox"/> New Construction <input type="checkbox"/> Recomplete <input checked="" type="checkbox"/> Other <b>NAME CHANGE</b> <input type="checkbox"/> Final Abandonment Notice <input checked="" type="checkbox"/> Change Plans <input type="checkbox"/> Plug and Abandon <input type="checkbox"/> Temporarily Abandon <input type="checkbox"/> Water Disposal <input type="checkbox"/> Convert to Injection <input type="checkbox"/> Plug Back

13. Describe Proposed or Completed Operations (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once Testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

QUESTAR EXPLORATION AND PRODUCTION COMPANY (QEP) REQUEST PERMISSION TO CHANGE THE DRILLING PLANS FOR THIS WELL AND TO USE OIL BASE MUD FOR THE DRILLING OF THE FINAL SECTION OF THIS WELL TO IMPROVE DRILLING EFFICIENCY, WELLBORE STABILITY AND TO PROMOTE A GOOD CEMENT JOB OF THE PRODUCTION CASING. ATTACHED IS A DRILLING PLAN, WELLBORE DIAGRAM, DRILLING FLUID PROPOSAL AND A PROPOSAL FOR PROCESSING AND DISPOSAL OF THE OIL BASE MUD.

QUESTAR EXPLORATION AND PRODUCTION COMPANY (QEP) IS REQUESTING TO CHANGE THE WELL NAME FROM GH 7MU-19-8-21 TO GH 7D-19-8-21.

QUESTAR EXPLORATION & PRODUCTION COMPANY (QEP) WILL PROVIDE THE PROPER PAPER WORK TO THE BUREAU OF INDIAN AFFAIRS AND UTE TRIBE.

FOR TECHNICAL QUESTIONS, PLEASE CONTACT JIM DAVIDSON, CHIEF DRILLING ENGINEER FOR QEP, AT (303) 308-3090.

14. I hereby certify that the foregoing is true and correct

Name (Printed/Typed)

Jan Nelson

Signature

Title

Regulatory Affairs

Date

October 12, 2007

**THIS SPACE FOR FEDERAL OR STATE USE**

Approved by

Title

Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on reverse)

RECEIVED

OCT 15 2007

CONFIDENTIAL

DIV. OF OIL, GAS & MINING

DRILLING PROGRAM

ONSHORE OIL & GAS ORDER NO. 1  
Approval of Operations on Onshore  
Federal Oil and Gas Leases

All lease and/or unit operations will be conducted in such a manner that full compliance is made with applicable laws, regulations (43 CFR 3100), Onshore Oil and Gas No. 1, and the approved plan of operations. The operator is fully responsible for the actions of his subcontractors. A copy of these conditions will be furnished the field representative to insure compliance.

**1. Formation Tops**

The estimated tops of important geologic markers are as follows:

<u>Formation</u>	<u>Depth</u>
Uinta	Surface
Green River	2,545'
Wasatch	6,020'
Mesaverde	9,295'
Sego	11,478'
Castlegate	11,795'
Blackhawk	12,123'
Mancos Shale	12,579'
Mancos B	13,003'
Frontier	15,709'
Dakota Silt	16,601'
Dakota	16,803'
TD	17,300'

**2. Anticipated Depths of Oil Gas Water and Other Mineral Bearing Zones**

The estimated depths at which the top and bottom of the anticipated water, oil, gas. Or other mineral bearing formations are expected to be encountered are as follows:

<u>Substance</u>	<u>Formation</u>	<u>Depth</u>
Gas	Wasatch	6,020'
Gas	Mesaverde	9,295'
Gas	Blackhawk	12,123'
Gas	Mancos Shale	12,579'
Gas	Mancos B	13,003'
Gas	Dakota	16,803'

All fresh water and prospectively valuable minerals encountered during drilling will be recorded by depth and adequately protected. All oil and gas shows will be tested to determine commercial potential.

DRILLING PROGRAM

All water shows and water-bearing sands will be reported to the BLM in Vernal, Utah. Copies of State of Utah form OGC-8-X are acceptable. If flows are detected, samples will be submitted to the BLM along with any water analyses conducted. Fresh water will be obtained from Wonsits Valley water right # A36125 (which was filed on May 7, 1964,) or Red Wash water right # 49-2153 (which was filed on March 25, 1960). It was determined by the Fish and Wildlife Service that any water right number filed before 1989 is not depleting to the Upper Colorado River System, to supply fresh water for drilling purposes. All water resulting from drilling operations will be disposed of at Red Wash Central Battery Disposal Site; SWSE, Section 27, T7S, R23E or Wonsits Valley Disposal Site; SWNW, Section 12, T8S, R21E.

3. **Operator's Specification for Pressure Control Equipment:**

- A. 13-5/8" 5000 psi double gate, 5,000 psi annular BOP (schematic included) from surface hole to 9-5/8" casing point. A 13-5/8" 10,000 psi double and single gate may be substituted based on contractor availability and substructure height of the drilling rig.
- B. 11" or 13-5/8" 10,000 psi double gate, 10,000 psi single gate, 10,000 psi annular BOP (schematic included) from 9-5/8" casing point to total depth. The choice of BOP stacks is based on the drilling contractor's availability.
- C. Functional test daily
- D. All casing strings shall be pressure tested (0.2 psi/foot or 1500 psi, whichever is greater) prior to drilling the plug after cementing; test pressure shall not exceed the internal yield pressure of the casing.
- E. Ram type preventers and associated equipment shall be tested to approved stack working pressure if isolated by test plug or to 50 percent of internal yield pressure of casing whichever is less. BOP and related equipment shall meet the minimum requirements of Onshore Oil and Gas Order No. 2 for equipment and testing requirements, procedures, etc..., for a 10M system and individual components shall be operable as designed.

DRILLING PROGRAM

4. **Casing Design:**

Hole Size	Csg. Size	Top (MD)	Bottom (MD)	Wt.	Grade	Thread	Cond.
26"	20"	sfc	40-60'	Steel	Cond.	None	Used
17-1/2"	13-3/8	sfc	500'	54.5	K-55	STC	New
11"	9-5/8"	sfc	9000'	47	HCP-110	Flush Jnt **	New
8-1/2"	7"	8500'	12,650'	29* SDrift	HCP-110	LTC	New
6-1/8"	4-1/2"	sfc	13,700'	15.1	P-110	LTC	New
6-1/8"	4-1/2"	13,700'	17,300'	15.1	Q-125	LTC	New

Casing Strengths:				Collapse	Burst	Tensile (minimum)
13-3/8"	54.5 lb.	K-55	STC	1,130 psi	2,730 psi	547,000 lb.
9-5/8"	47 lb.	HCP-110	LTC	7,100 psi	9,440 psi	1,213,000 lb.
7"	29 lb.*	HCP-110	LTC	9,200 psi	11,220 psi	797,000 lb.
4-1/2"	15.1 lb.	P-110	LTC	14,350 psi	14,420 psi	406,000 lb.
4-1/2"	15.1 lb.	Q-125	LTC	15,840 psi	16,380 psi	438,000 lb.

\* Special Drift

\*\* Flush Jnt – VAM SLIJ II

**MINIMUM DESIGN FACTORS:**

COLLAPSE: 1.125

BURST: 1.10

TENSION: 1.80

Area Fracture Gradient: 0.9 psi/foot

Maximum anticipated mud weight: 15.4 ppg

Maximum surface treating pressure: 12,500 psi

DRILLING PROGRAM

5. **Auxiliary Equipment**

- A. Kelly Cock – yes
- B. Float at the bit – yes
- C. Monitoring equipment on the mud system – visually and/or PVT/Flow Show
- D. Full opening safety valve on the rig floor – yes
- E. Rotating Head – yes  
If drilling with air the following will be used:
  - 1. The blooie line shall be at least 6” in diameter and extend at least 100’ from the well bore into the reserve/blooie pit.
  - 2. Blooie line ignition shall be provided by a continuous pilot (ignited when drilling below 500’).
  - 3. Compressor shall be tied directly to the blooie line through a manifold.
  - 4. A mister with a continuous stream of water shall be installed near the end of the blooie lines for dust suppression.

Surface hole will be drilled with air, air/mist, foam, or mud depending on hole conditions. Drilling below surface casing will be with water based drilling fluids consisting primarily of fresh water, bentonite, lignite, caustic, lime, soda ash and polymers. No chromates will be used. Oil based drilling mud will be used to drill the final section of the hole. The water based and oil based drilling system specifics are attached to this APD. Maximum anticipated mud weight is 15.4 ppg.

No minimum quantity of weight material will be required to be kept on location.

PVT/Flow Show will be used from base of surface casing to TD.

Gas detector will be used from surface casing depth to TD.

6. **Testing, logging and coring program**

- A. Cores – none anticipated
- B. DST – none anticipated
- C. Logging – Mud logging – 4500’ to TD  
GR-SP-Induction, Neutron Density, FMI



DRILLING PROGRAM

- D. Formation and Completion Interval: Mancos interval, final determination of completion will be made by analysis of logs.  
Stimulation – Stimulation will be designed for the particular area of interest as encountered.

7. **Cementing Program**

**20" Conductor:**

Cement to surface with construction cement.

**13-3/8" Surface Casing: sfc – 500' (MD)**

**Slurry:** 0' – 500'. 610 sxs (731 cu ft) Premium cement + 0.25 lbs/sk Flocele + 2% CaCl<sub>2</sub>  
Slurry wt: 15.6 ppg, slurry yield: 1.20 ft<sup>3</sup>/sx, slurry volume: 17-1/2" hole + 100% excess.

**9-5/8" Intermediate Casing: sfc - 9000' (MD)**

**Lead Slurry:** 0' – 8,600'. 1221 sks (319 bbls) Foamed Lead 50/50 Poz cement + 0.1 % FDP-C766-05 (Low Fluid Loss Control) + 5 #/sx Silicate Compacted + 20 % SSA-1 + 0.1 % Versaset + 1.5 % Zonesealant 2000 (Foamer) Slurry wt: 14.3 ppg, (unfoamed) or 11.0 ppg. (foamed) Slurry yield: 1.47 ft<sup>3</sup>/sk (unfoamed), Slurry volume: 12-1/4" hole + 35 % excess.

**Tail Slurry:** 8,600' – 9,000'. 115 sks (30 bbls) Tail 50/50 Poz cement + 0.1 % FDP-C766-05 (Low Fluid Loss Control) + 5 #/sx Silicate Compacted + 20 % SSA-1 + 0.1 % Versaset Slurry wt: 14.3 ppg, Slurry yield: 1.47 ft<sup>3</sup>/sk, Slurry volume: 12-1/4" hole + 35% excess.

**7" Intermediate Casing: 8,500 - 12,650' (MD)**

**Foamed Lead Slurry 2:** 8,500' – 12,650'. 413 sks (657 cu ft) 50/50 Poz Premium + 20% SSA-1 + 3 % silicalite compacted + 3% Silicalite Compacted + 0.5% Halad 344 + 0.2% Halad 413 + 0.1% HR-12 + 0.7% Super CBL + 0.2% Suspend Slurry wt: 14.0 ppg,, Slurry yield: 1.59 ft<sup>3</sup>/sk, Slurry volume: 8-1/2" hole + 25% excess.

**4-1/2" Production Casing: sfc - 17,300' (MD)**

**Lead/Tail Slurry:** 6,000 - 17,300'. 964 sks (1436 cu ft) Premium Cement + 17.5% SSA-1, + 4% Microbond HT, + 0.2% Halad 344 + 0.5% Halad 413, + 0.3% CFR-3, + 0.9% HR-12, + 0.2% Super CBL, + 0.2% Suspend HT, 17.5% SSA-2. Slurry wt: 16.2 ppg, Slurry yield: 1.49 ft<sup>3</sup>/sk, Slurry volume: 6-1/8" hole + 35% in open hole section.

\*Final cement volumes to be calculated from caliper log with an attempt to be made to circulate cement to the surface on the intermediate string and 6,000' on the production string. A bond log will be run across the zone of interest and across zones as required by the authorized officer to insure protection of natural resources.

DRILLING PROGRAM

8. **Anticipated Abnormal Pressures and Temperatures, Other Potential Hazards**

No abnormal temperatures or pressures are anticipated. No H<sub>2</sub>S has been encountered in or known to exist from previous wells drilled to similar depths in the general area. Maximum anticipated bottom hole pressure equals approximately 13,800 psi. Maximum anticipated bottom hole temperature is 315° F.

9. **ADDITIONAL INFORMATION FOR OIL BASE MUD:**

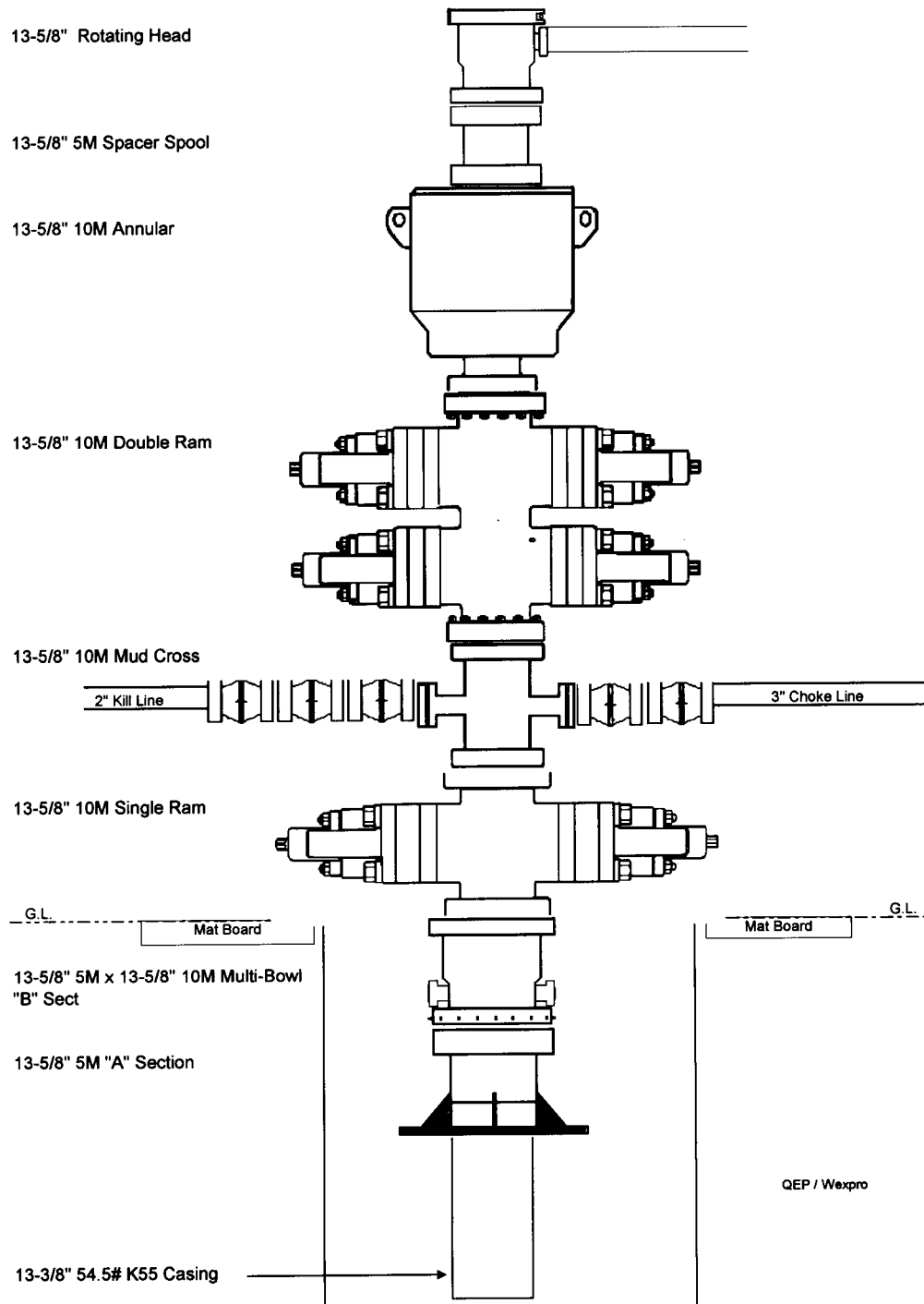
- A. See attached diagram of well pad layout. A reserve pit will be constructed for this location. This pit will be constructed so that a minimum of two vertical feet of freeboard exists above the top of the pit at all times and at least one-half of the holding capacity will be below ground level. The pit will be lined with a synthetic reinforced liner, 30 millimeters thick, with sufficient bedding used to cover any rocks prior to putting any fluids into the pit. The pad will be designed so that runoff from adjacent slopes does not flow into the reserve pit. The liner will overlap the pit walls and be covered with dirt and/or rocks to hold it in place. At the beginning of drilling operations this reserve pit will have an open-ended dike placed in the pit that allows the fluids to migrate from one side of the pit to the other during the drilling of the surface and intermediate hole using water based mud. At the time that operations begin to drill the production hole with oil base mud, this dike will be extended, dividing the pit into two distinct, isolated halves allowing no migration of fluids from one side to the other. At that time all fluids will be removed from the end of the pit to be used as a cuttings pit. This cuttings pit will be used for oil based cuttings generated during drilling of the production hole.
- B. Oil-base mud will be mixed in the closed circulating system and transferred to four 500-bbl tanks on location for storage prior to and after drilling operations. Drip pans will be installed below the rotary beams on the substructure and can be viewed on site from the cellar area. As the production section of the hole is drilled, the cuttings transported to the surface with the drilling fluid will be mechanically separated from the drilling fluid as waste by two shale-shakers and then cleaned/dried via a mud cleaner and/or centrifuge. These separated cuttings will be collected in a steel catch tank once they leave the closed circulating system and transported and placed into the cuttings half of the reserve pit.

DRILLING PROGRAM

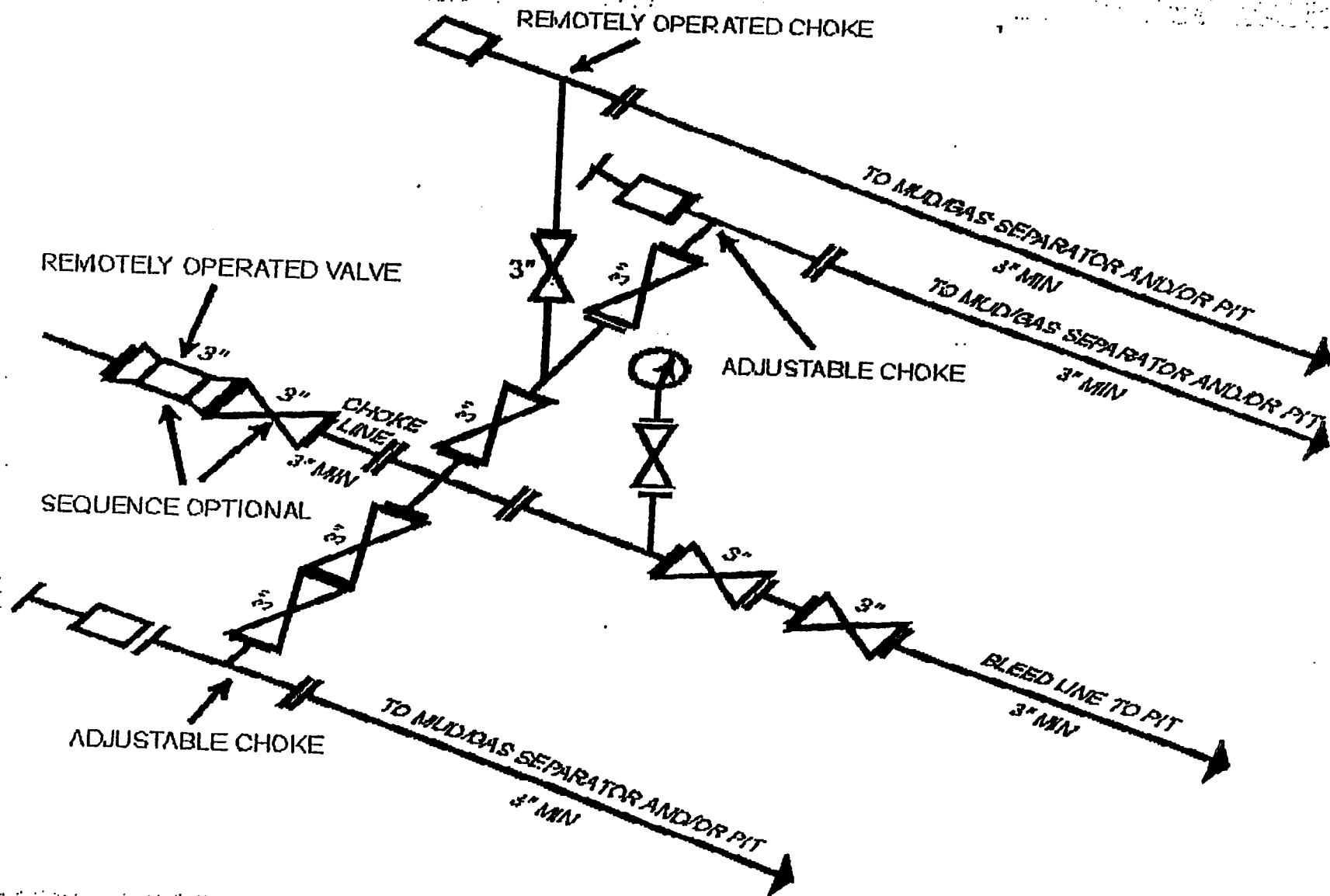
- C.** Plastic material will underlay the rig, oil base mud/diesel storage tanks and mud pits. All tanks on location will be placed inside of berms. Any oily waste fluids and sediments generated at the work site during drilling operations or when cleaning the fluid containment system after drilling will also be placed into the cuttings half of the pit.
- D.** All rig ditches will be lined and directed to a lined sump for fluid recovery. A drip pan will be installed on the BOP stack, a mud bucket will be utilized as needed on connections and a vacuum system will be used on the rig floor for fluid recovery in those areas.
- E.** Once all waste has been placed in the cuttings portion of the pit and all necessary approvals obtained, the oilfield waste management consultant Soli-Bond or a similar company will mobilize equipment and personnel to the site to perform the cement based solidification/stabilization process in-situ for encapsulation. Soil will be backfilled over the processed material used on the cuttings side of the pit and that portion of the pit area will be returned to the existing grade bordering the pit. Please see the attached Soli-Bond Proposal for Processing and Disposal of Drilling Waste for specific details. The half of the reserve pit containing water base materials will be left to evaporate and will be closed and reclaimed at the time that portion of the pit is dry.

## DRILLING PROGRAM

### BOP Requirements:



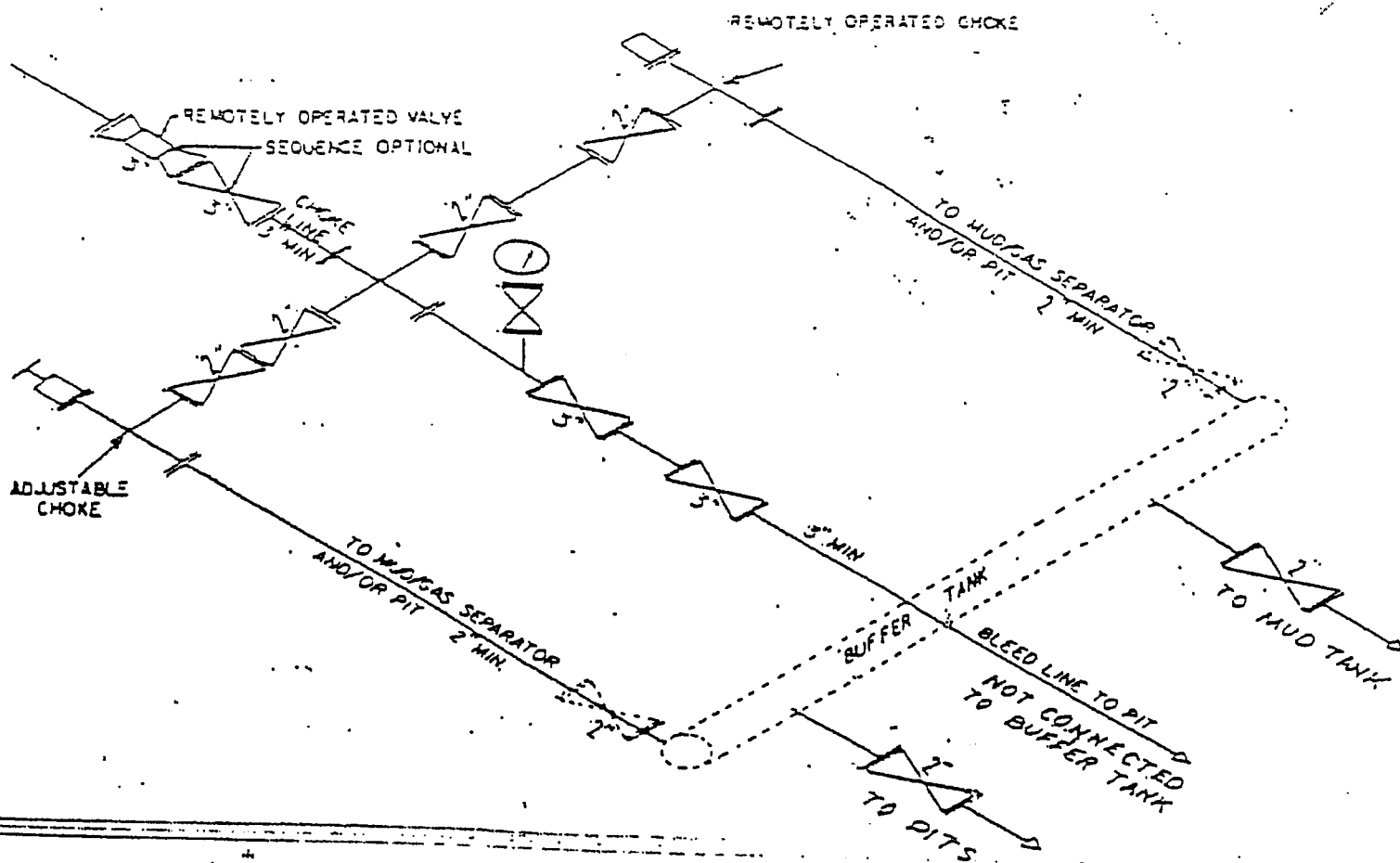
# Attachment I. Diagrams of Choke Manifold Equipment



1-4 10M and 15M Choke Manifold Equipment -- Configuration of chokes may vary

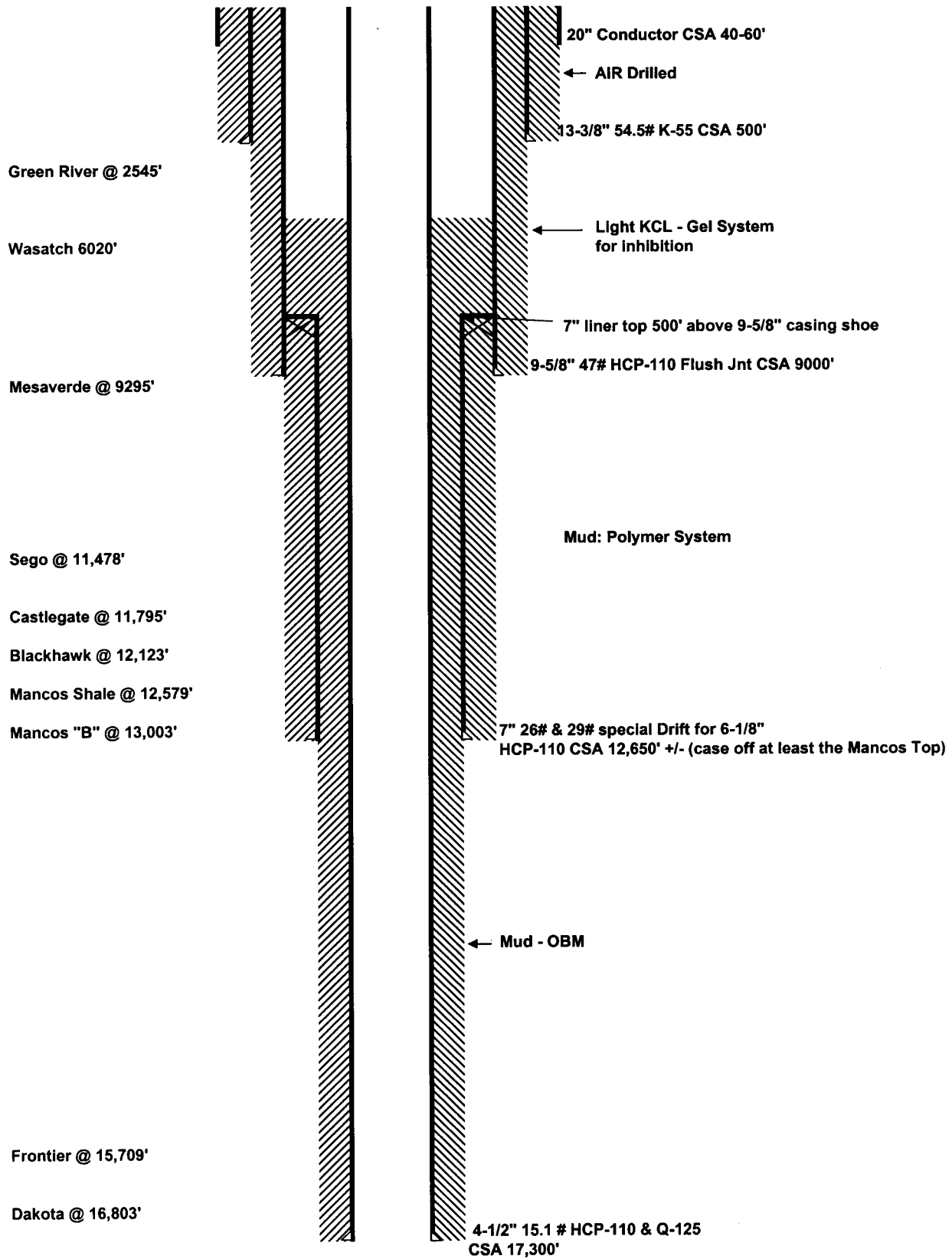
[34 FR 39528, Sept. 27, 1969]

Last Updated March 25, 1997 by John Broderick



② 5M CHOKE MANIFOLD EQUIPMENT — CONFIGURATION OF CHOKES MAY VARY

## GH 7D-19-8-21





**Questar  
Exploration &  
Production Company**

***GH 7d-19-8-21***

***Sec 19-T8S-R21E  
Uintah County, Utah***

***Drilling Fluids Program***

***410 17<sup>th</sup> Street, Suite 460 Denver, CO 80202  
(303) 623-2205 (720) 904-7970 Fax***





## Newpark Drilling Fluids, LP

410 17<sup>th</sup> Street, Suite 460

■ Denver, Colorado 80202

■ (303) 623-2205

■ FAX (720) 904-7970

August 6, 2007

Mr. Jim Davidson  
Chief Drilling Engineer  
Questar Exploration & Production  
1331 17th Street, Suite 800  
Denver, Colorado 80202

RE: GH 7d-19-8-21  
Sec 19-T8S-R21E  
Uintah Co, Utah

Mr. Davidson:

Newpark Drilling Fluids, LP is pleased to present the enclosed revised recommended drilling fluids program for the GH 7d-19-8-21 well to be drilled in Uintah County, Utah.

The Surface Interval will be drilled with air to a depth of 500 ft.

For the Intermediate Interval, it is recommended to drill out with 3% KCL water pumping NewGel sweeps as needed for hole cleaning. At 5500-5800 ft or before drilling into the Wasatch, mud up to a 3% KCL/Polymer system. Trona water flows in this area may require a mud weight of 9.5 ppg to control. Use this fluid to casing point at 8,500'

In the Liner interval, drill out with the fluid from the previous interval. Discontinue additions of KCL. Allow KCL to deplete through dilution allowing the system to convert to a NewPHPA/Polymer system. Mud weight in this interval is expected to be in the 12.0-12.5 range at the 12,650 ft liner interval T.D.

In the Production interval, displace to a 12.0 ppg OptiDrill OBM system. Maintain fluid density as low as possible to increase penetration rates and reduce the possibility of lost circulation. Use high weight pills for well control during; trips, logs, and casing operations. Mud weight at T.D. is expected to be at +/-15.0 ppg.

The projected drilling time for this project is 65-70 days with an estimated material and engineering cost of \$500,000.00 assuming no unusual delays or problems are encountered. The estimate is based on minimal losses and a 15.0 ppg mud weight at TD. Costs will increase dramatically if severe losses are encountered.

All sack material and bulk barite will be furnished from our Grand Junction, Colorado facility, with OBM supplied from Newpark's Boulder, WY facility.

If you have any questions following your review of this proposal, please call.

Regards,

Estes Ward  
Operations Manager  
Newpark Drilling Fluids, LP

# Project Summary

Questar  
Exploration & Production  
GH 7d-19-8-21  
Sec 27-T7S-R22E  
Uintah, County Utah

Depth (ft)	Formations	Interval Comments	Mud Weight (ppg)	Mud Properties
500'	Uinta Surface T.D.	Hole size: 17 1/2" / Casing: 13 3/8"  AIR DRILLED	NA	NA
2,545' 3,375'	Green River Mahogeny	KCL/NewPHPA Hole size: 11.0" / Casing: 9 5/8" Flush Joint  Drill out with water, adding KCL for 2-3%. Pump pre-hydrated NewGel sweeps for hole cleaning. For seepage, incorporate fine LCM into the NewGel sweeps.	8.6  9.0	Vis (sec/qt): 28-40 PV (cp): 0-12 YP (#s/100ft <sup>2</sup> ): 0-10 FL (ml/30 min): 8-10 LGS %: 3-5
6,020' 8,500'	Wasatch Intermediate T.D.	Begin mud up operations at +/- 5500 ft or before drilling into the Wasatch. It is recommended to have the KCL % at 3.0 or > before drilling into the Wasatch. Maintain the fluid loss at 8 mls with AquaBloc/NewPac. Maintain rheology control with NewEdge, CFL II, and DrillThin. Maintain hardness at 100 mg/l or > with lime/Gyp additions. As seepage is encountered, pump LCM sweeps as conditions dictate. Mud weight at T.D. is expected to be in the 9.4-9.5 ppg range	9.5	pH: 10.0-10.5 Cl (mg/l): 11-15K KCL %: 2.5-3.0
9,295' 11,478' 11,756' 11,795' 12,123' 12,579'	Mesa Verde  Sego Bucktongue Castlegate Blackhawk Mancos Shale	NewPHPA Hole size: 8.5" / Liner: 7"  Drill out, running fresh water, allowing the KCL % to drop. Maintain properties as recommended and increasing the PHPA concentration to 1.0 ppb. Lost circulation may be a problem in this interval. If lost circulation is encountered, pump LCM pills as needed. If LCM pills will not control losses, by-pass the shakers and increase the LCM concentration in the system as needed. If severe lost circulation is encountered, consider a DynaPlug squeeze. Hole instability may be encountered in the Mesa Verde. Monitor torque, pump pressure, connection fill, and trip conditions for indications of hole instability and consider adding Asphalt if hole conditions dictate.	9.8  10.4 11.4 11.6	Vis (sec/qt): 40-45 PV (cp) : 12-20 YP (#s/100ft <sup>2</sup> ) : 10-12 FL (ml/30 min): 6-8 LGS %: 3-5 pH: 10.0-10.5 Cl (mg/l): 11-15K KCL %: 0
12,600' 13,003' MD 15,709' MD 16,803' MD 17,203' MD 17,300' MD	Liner T.D.  Mancos B  Frontier equiv.  Dakota Morrison Total Depth	OptiDrill OBM Hole size: 7.0" / Casing: 4-1/2"  Drill out with the OptiDrill system, treating cement contamination as needed with OptiWet to prevent shaker blinding.  Maintain hole cleaning during high ROP's with high viscosity sweeps. Use a 1:1 ratio of OptiVis RM and OptiVis.  CO <sub>2</sub> in the gas stream while drilling under balanced will require additional Lime, emulsifiers and wetting agent.  Maintain mud weight as needed for well control. Spot high weight ECD pills for trips, logs, and casing operations.	12.4  12.5  15.0	PV (cp): 25-35 YP (lbs/100ft <sup>2</sup> ): 8-10 HPHT (mls/30 min.): <20 O/W : 80:20 - 85:15 ES: 500+ Lime: 2-4 ppb LGS %: < 6

Mud weights for guidelines only, allow hole conditions to dictate actual mud weight.



**Newpark Drilling Fluids, LP**

410 17th Street, Suite 460  
Denver, CO. 80202  
(303) 623-2205 FAX (720) 904-7970

# Project Summary

Questar  
Exploration & Production  
GH 7d-19-8-21  
Sec 27-T7S-R22E  
Uintah, County Utah

## DRILLING FLUID PROPERTIES

### Surface Hole: Air Drilled

Hole Size (in)	TVD (ft)	Mud Weight (ppg)	Plastic Viscosity (cp)	Yield Point (lb/100ft <sup>2</sup> )	API Fluid Loss (ml/30min)	Total Solids (%)
17 1/2 "	0-500'	NA	NA	NA	NA	NA

### Intermediate Hole: KCL Water NewGel Sweeps - KCL/PHPA

Hole Size (in)	MD (ft)	Mud Weight (ppg)	Plastic Viscosity (cp)	Yield Point (lb/100ft <sup>2</sup> )	API Fluid Loss (ml/30min)	KCL (%)	LGS Solids (%)
11"	500-5,500'	8.5-8.6	NA	NA	NA	2-3	< 1%
11 "	5,500'-8,500'	8.6-9.4	8-12	10-12	8-10	3.0	3-6

### Liner Interval: NewPHPA

Hole Size (in)	MD (ft)	Mud Weight (ppg)	Plastic Viscosity (cp)	Yield Point (lb/100ft <sup>2</sup> )	API Fluid Loss (ml/30min)	LGS Solids (%)
8 1/2 "	8,500'-12,600'	12.0-12.5	15-25	10-15	6-8	3-6

### Production Interval: OptiDrill OBM

Hole Size (in)	MD (ft)	Mud Weight (ppg)	Plastic Viscosity (cp)	Yield Point (lb/100ft <sup>2</sup> )	O/W Ratio (%)	HPHT Fluid Loss (ml/30min)	CaCL (mg/l) X 10,000	Electrical Stability (mv)	LGS Solids (%)
7.0 "	12,650'-17,300'	15.0-15.5	25-35	8-12	85/15	12-15	250-350	500 +	3-6

- Drilling fluid properties are guidelines only.
- Mud weights for guidelines only, allow hole conditions to dictate actual mud weights.
- Hole conditions should be closely monitored and product mix adjusted accordingly.



**Newpark Drilling Fluids, LP**

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# Intermediate Interval

## 11" Hole (500' - 8,500')

**Questar**  
**Exploration & Production**  
**GH 7d-19-8-21**  
**Sec 27-T7S-R22E**  
**Uintah, County Utah**

Intermediate Interval Drilling Fluid Properties									
Depth Interval (TVD)	Mud Weight (ppg)	Viscosity (sec/qt)	Plastic Viscosity (cp)	Yield Point (lb/100ft <sup>2</sup> )	pH	API Fluid Loss (ml/30min)	Hardness Mg/l)	Low Gravity Solids	KCL %
500'-5,500'	8.5-8.6	27-28	NA	NA	10.0-10.5	NA	100+	< 1.0	2.0-3.0
5,500'-8,500'	9.0-9.5	38-45	10-15	8-12	10.0-10.5	8-10	100+	3-6	3.0+

- Drill out mixing KCL for 3%. Pump pre-hydrated NewGel sweeps for additional hole cleaning and as hole conditions dictate. Add LCM to the sweeps for seepage.
- Mud up at 5,500 ft + to a KCL/Polymer system with properties as outlined above.
- If seepage is encountered, pump LCM sweeps as needed.
- Before drilling into the Wasatch, increase the KCL concentration to 3% or better.
- If Trona water is encountered, treat with Lime as needed for a 10.2 pH and 100 mg/l hardness.
- Mud weight at Intermediate T.D. is expected to be in the 9.2-9.4 ppg range.

Challenges:	Strategies:
Bit Balling	Use <b>New Ease 203</b> (1-2 gal. down the drill pipe on connections) <b>SAPP</b> and <b>Soap Sticks</b> to prevent balling and to increase penetration rates.
Water Flows (Trona)	If water flows become excessive, mud up and increase mud weight as needed for control. Treat carbonate contamination with <b>Lime/ Calcium Chloride</b> as needed.
Lost Circulation	For seepage pump 50 bbl sweeps with 5-10 ppb <b>DynaFiber</b> and 10-20 ppb <b>NewCarb</b> as needed. For partial or total losses pump sweeps with 10-15 ppb <b>FiberSeal</b> and <b>Cedar Fiber</b> . If losses are not controlled with sweeps consider 10-15% LCM in active system. If losses are severe the use of a <b>DynaPlug Squeeze</b> is strongly recommended.
Differential Sticking	Maintain mud weight as low as possible. Control Low Gravity Solids below 6%, and control fluid loss at 8-10 mls/30 min.
Increase ROP with PDC Bits	Pump 20-40 bbl. Sweeps with NewEase 203, New100N, DynaDet, and SAPP. (FlexDrill Sweeps)
Hole Instability/Sloughing Shale	Consider additions of Asphalt at 4-6 ppb and/or Potassium Silicate at 1-2 ppb.



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## Intermediate Interval 11" Hole (500'- 8,500')

Questar  
Exploration & Production  
GH 7d-19-8-21  
Sec 27-T7S-R22E  
Uintah, County Utah

### Offset Data:

Some wells in this area have experienced losses in the Wasatch formation. LCM sweeps are strongly recommended for this reason. Mud weights should be kept as low as practical but increases to 9.5 ppg may be required to control the Trona Water flows which can be encountered from 3,000-4,000'.

### Fluid Recommendations:

- Drill out cement, float collar and new formation. Test the integrity of the casing seat and squeeze if necessary.
- Close in pits and begin additions of **KCL**, building to 3% before drilling the Wasatch. Maintain 3% KCL throughout the interval.
- If a Trona Water flow is encountered additions of **Lime** and/or **Calcium Chloride** should be used to adjust alkalities as needed. An increase of mud weight to 9.5 may be necessary to control water flows in this area.
- The use of a premix tank is highly recommended. Pre-Hydrate **NewGel** for use as sweeps and for viscosity when a mud up is started at +/- 4,000'. Fill premix tank with fresh water. Treat out hardness with **SodaAsh** as needed. Add 0.25-0.5 ppb **Caustic Soda** for a 10.0-10.5 pH. Begin additions of 20-25 ppb **NewGel** allow sufficient circulating time for maximum hydration. Add 1.0-2.0 ppb **CFL II**. Then mix additional **NewGel** (30-40 ppb total) or a 120+ funnel viscosity. The pre-hydrated bentonite can be pumped from the premix to the pill tank and pumped downhole for sweeps or can be added slowly to the 3% KCL water for viscosity and rheology control.
- At 5,500'-6,000' (or before drilling into the Wasatch formation) begin a mud up. Add pre-hydrated **NewGel** from the premix tank to the active system to increase funnel viscosity to 35-40 sec/qt. Maintain viscosity with pre-hydrated **NewGel** as needed. The system should be monitored and additions of **KCL** be adjusted to maintain 3% KCL.
- Rheology can be enhanced with additions of .25-1.0 ppb **Flowzan** as needed.
- Reduce Fluid Loss to 8-10CC/30min with additions of 0.5-1.0 ppb **NewPAC** and/or 2-4 ppb **Aqua Bloc** by 5,500' and lower to 6-8 CC/30min prior to TD at 11,900'.
- If penetration rates slow sweeps with **New 100N**, **NewEase 203**, **SAPP**, and **DynaDet** should be considered. (1% **New 100N**, 1% **NewEase 203**, 0.5-0.75 ppb **SAPP**, 0.2 % **DynaDet**). "**Flex Sweeps**"
- If an increase in mud weight is necessary seepage and/or lost circulation may become a problem. For seepage pump 20-30 bbl pills containing a combination of **NewCarb** and **DynaFiber** mixed at a 2:1 ratio.
- If losses become severe, LCM sweeps of **Cedar Fiber** and **FiberSeal** should be considered and incorporated into the system as needed. If losses continue, increase coarse LCM in active system to 15-20%. If losses continue the use of a **DynaPlug** Squeeze is strongly recommended.
- At TD increase funnel viscosity for logs and casing operations as hole conditions dictate. Suggest funnel viscosity be increased to 45-50 sec/qt, before logging operations be attempted.



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# Liner Interval

## 8 1/2" Hole (8,500'- 12,600')

Questar  
Exploration & Production  
GH 7d-19-8-21  
Sec 27-T7S-R22E  
Uintah, County Utah

Liner Interval Drilling Fluid Properties								
Depth Interval (TVD)	Mud Weight (ppg)	Viscosity (sec/qt)	Plastic Viscosity (cp)	Yield Point (lb/100ft <sup>2</sup> )	pH	API Fluid Loss (ml/30min)	Hardness Mg/l)	Low Gravity Solids
5,500'- 12,650'	12.0-12.5	40-50	18-25	10-15	10.0-10.5	6-8	100+	3-6

- After drilling out discontinue additions of KCL, allowing system to revert to a fresh water polymer system.
- As mud weight is increased, seepage losses can become severe. Treat with LCM pills as needed. If pill treatments will not contain the losses at reasonable levels, by-pass the shakers, retaining the pills and allowing the LCM concentration to increase as needed.
- Hole instability can occur in the Mesa Verde in this area. If encountered, consider adding Asphalt, building to a 4-6 ppb concentration.
- High pressure may be encountered in the Castlegate/Blackhawk. Monitor closely for increased pressure while drilling and use caution on trips to minimize possible swabbing.
- Mud weight at Liner Interval T.D. is expected to be in the 12.0-12.5 ppg range.

Challenges:	Strategies:
Hole Instability/Sloughing Shale	Consider 4-6 ppb Asphalt
Increase in Formation pressure	Monitor well conditions and increase density as needed with <b>NewBar</b> as needed.
Seepage/Lost Circulation	As mud weight is increased (10.0ppg +) seepage and losses may become a problem. For seepage pump 50 bbl sweeps with 5-10 ppb <b>DynaFiber</b> and 10-20 ppb <b>NewCarb</b> as needed. For partial or total losses pump sweeps with 10-15 ppb <b>FiberSeal</b> and <b>Cedar Fiber</b> . Severity of losses will determine size and quantity of LCM added. If losses are not controlled with sweeps consider 10-15% LCM in active system. For severe losses the use of a <b>DynaPlug</b> squeeze should be considered.
Differential Sticking	Maintain mud weight as low as possible. Control Low Gravity Solids below 6%, and control fluid loss at 8-10 mls/30 min.
Increase ROP with PDC Bits	Pump 20-40 bbl. Sweeps with NewEase 203, New100N, DynaDet, and SAPP. (FlexDrill Sweeps)



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# Liner Interval

8 1/2" Hole (8,500' - 12,600')

Questar  
Exploration & Production  
GH 7d-19-8-21  
Sec 27-T7S-R22E  
Uintah, County Utah

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## Offset Data:

Wells in this area have experienced losses as mud weights are increased to control formation pressure. LCM sweeps are strongly recommended for this reason. Mud weights should be kept as low as practical but increase to 12.5 ppg may be required by Liner TD at 12,650'.

## Fluid Recommendations:

- Drill out cement, float collar and new formation with the system from the previous interval. Test the integrity of the casing seat and squeeze if necessary.
- Discontinue additions of **KCL**. Allow **KCL** to naturally dissipate by dilution with fresh water. Begin additions of 0.5-1.0 ppb **NewPHPA** and maintain throughout the interval.
- Maintain viscosity with PreHydrated **NewGel** until chlorides have dropped below 5000-7000 mg/l. After chlorides have dropped **NewGel** will not need to be pre-hydrated and can be added directly to the system.
- Begin additions of **NewPHPA**. Concentration of **NewPHPA** should be maintained at 0.5-1.0 ppb throughout the interval. As mud weight increases additions of **PHPA** should be switched from **NewPHPA DLMW** to the shorter chain **NewPHPA DSL**.
- If hole conditions dictate, consider 4-6 ppb Asphalt.
- If penetration rates slow sweeps with **New 100N**, **NewEase 203**, **SAPP**, and **DynaDet** should be considered. (1% **New 100N**, 1% **NewEase 203**, 0.5-0.75 ppb **SAPP**, 0.2 % **DynaDet**). "**Flex Sweeps**"
- Increase mud weight as needed to control formation pressures as needed. Mud weights should be maintained as low as practical to reduce chance of losses and differential sticking. Increase mud weight as needed with **NewBar**.
- As density increases additions of **NewEdge** and/or **DrillThin** should be added for rheology control.
- As bottom hole temperatures increase and additional fluid loss control is desired supplement the **NewPAC** with **DynaPlex** for fluid loss control. Lower API filtrate to 6-8 cc's with additions of **NewPAC** and **DynaPlex**.
- As mud weight is increased seepage and/or lost circulation may become a problem. For seepage pump 20-30 bbl pills containing a combination of **NewCarb** and **DynaFiber** mixed at a 2:1 ratio. If partial or total returns are encountered, LCM sweeps with a varied size distribution including **Cedar Fiber** and **Fiber Seal**, **PhenoSeal** and other assorted sizes should be considered and incorporated into the system as needed. 20-25% LCM in the active system may be required. The type, size and quantity of LCM used will depend on the severity of losses. If losses are severe a **DynaPlug** squeeze should be considered.
- At TD increase funnel viscosity for logs and casing operations as hole conditions dictate. Suggest funnel viscosity be increased to 50-55 sec/qt, before logging or casing operations be attempted.
- While circulating casing it is recommended to reduce Yield Points for cementing operations.



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# Production Interval

6 1/8" Hole (12,600'-17,300')

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Exploration & Production  
GH 7d-19-8-21  
Sec 27-T7S-R22E  
Uintah, County Utah

## Production Interval Drilling Fluid Properties

Depth Interval (TVD)	Mud Weight (ppg)	Plastic Viscosity (cp)	Yield Point (lb/100ft <sup>2</sup> )	O/W Ratio %	HTHP Fluid Loss (ml/30min)	Excess Lime (PPB)	Electrical Stability (MV)	Low Gravity Solids	CaCl Mg/l Water
12,600'-17,300'	15.0-15.5	25-35	8-10	85:15	12-15	2-4	500+	< 6	300K

### Drilling Fluid Recommendations: (12,600'-17,300')

- Displace to a OptiDrill OBM after finishing the liner job at 12,600'.
- After displacement, maintain the OptiDrill system within the parameters outlined above.
- Offsets in the area have encountered high rates of seepage in this interval. If indications of seepage are observed, sweeps of NewCarb C, Dynafiber C & M, NewSeal, and CyberSeal are recommended. Mixing ratios are recommended to be at 5:1 NewCarb M to DynaFiber, NewSeal, and CyberSeal. If losses continue to be a problem, consider trying different sizes and combinations until seepage is slowed.
- Maintain rheology low to reduce ECD values and reduce surge and swab during connections and trips.
- Drill as underbalanced as possible to help prevent losses and increase penetration rates.
- For pressure control, spot high weight pills with an equivalent mud weight to drilling ECD's. On trips in, stage these pills out and divert to storage for further use. High weight pills in excess of the drilling ECD should be avoided due to possible lost circulation.

Challenges	Strategies
Displacement	<ul style="list-style-type: none"> <li>• Have 1200-1300 bbls of OBM volume on location along with a pump capable of keeping up with displacement rates.</li> <li>• Pump a 10-20 bbl viscosified OBM spacer ahead of the OptiDrill (enough for 500 ft + separation)</li> <li>• A steady pump rate for either turbulent or plug flow should be used. Reciprocate and rotate to assist in minimizing channeling.</li> <li>• Do not shut down once displacement commences.</li> <li>• Should any contamination occur, isolate the contaminated fluid for reconditioning.</li> </ul>
Seepage/lost Circulation.	Pump LCM sweeps when seepage and/or losses are indicated. Sweeps should be a mixture of, NewCarb, DynaFiber, NewSeal, and CyberSeal. If lost returns are encountered, consider a Diaseal M or cross linked polymer squeeze.
Maintaining Oil wet solids	For every 1.0 ppg mud weight increase, mix 0.02 gal/bbl OptiWet
Pressure control	<ul style="list-style-type: none"> <li>• Spot weighted pills calculated to give a bottom hole pressure equal to drilling ECD.</li> <li>• Do not exceed drilling bottom hole pressure with the ECD pill. Lost circulation has been a problem on offset wells.</li> <li>• Stage weighted pills out of the hole and recover for future use.</li> </ul>



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# Production Interval

## 6 1/8" Hole (12,600' - 17,300')

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Exploration & Production  
GH 7d-19-8-21  
Sec 27-T7S-R22E  
Uintah, County Utah

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### Maintenance Procedure:

**HPHT** - Maintain HPHT values within programmed parameters. Additions of **OptiMul** and **OptiPlus**, at recommended concentrations should maintain the HTHP at recommended levels. If hole conditions indicate a need for lower HPHT values, **Opti G** at 2-4 ppb is recommended.

**Electrical Stability**— Electrical stability should be used as a guide not as an absolute in determining maintenance requirements. Actual values are not critical but should be observed for trends or changes. Decreases in electrical stability should be noted along with other mud properties to determine treatments. To increase electrical stability add emulsifiers and wetting agents **OptiMul** and **OptiPlus** or decrease water content.

**Oil/Water Ratio** - Maintain the oil/water ratio in the 90:10-80:20 range depending on mud weight and condition.. Higher water content will decrease the amount of **OptiVis** needed for rheology.

**Mud weight** - Maintain minimum fluid densities with solids equipment. Monitor hole conditions and all drilling parameters closely for indications of increases in formation pressures and adjust fluid densities accordingly. Drilling with a minimum amount of overbalance will reduce the possibility of losing returns and/or of differentially sticking the drill string. Mud weight on offset wells was in the 15.0-15.5 ppg range at T.D.

**Rheology** - Maintain solids as low as possible. Increase rheology as needed for hole cleaning with a combination of **OptiVis (Bentone 910)** and **Opti Vis RM or Opti Vis PS** and water content.

**Lime** - Maintain the excess Lime at 2-3 ppb excess.

**Hole cleaning** - Calculate rheology requirements based on ROP, pump rates and hole conditions. Adjust as needed .

**Mud losses downhole**—Monitor ECD's with Hy-Calc, maintaining the lowest values possible. If losses are encountered; sweeps containing **NewCarb**, **DynaFiber**, **Opti-G**, and **NewSeal** should be circulated to aid in the prevention of losses. If seepage losses continue and/or become severe, consider spotting a pill with **Magma Fiber (Fine & Regular)** and the above formulation. Keep the hole full at all times, and avoid excessive swabbing and/or surge actions when tripping.

**Solids Control** - Maintain low gravity solids at 4-6 % by volume. The high performance shakers should be equipped with the finest mesh screens that will handle the circulating volume and not cut barite out.

**Water Contamination**— Keep all water sources off the mud pits. If contamination occurs, treat with emulsifiers and Calcium Chloride as needed.



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# Production Interval

6 1/8" Hole (12,600' - 17,300')

Questar  
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GH 7d-19-8-21  
Sec 27-T7S-R22E  
Uintah, County Utah

**Recommended materials for relaxed filtrate OptiDrill system :**  
**( 85:15 Oil/Water Ratio)**

Product	Function	Concentration
<i>NewBar</i>	Weighting material	As needed
<i>OptiVis</i>	Organophilic Clay / Viscosifier	2-4 ppb
<i>OptiMul</i>	Primary Emulsifier	2.0 ppb
<i>OptiPlus</i>	Secondary Emulsifier	4.0 gal/bbl.
<i>OptiVis RM</i>	Low End Rheology Modifier	0.1-0.2 ppb
<i>Calcium Chloride Water</i>	Internal Phase	10.0%-20.0 % by volume
<i>Calcium Chloride</i>	Salinity/Activity	300,000 - 350,000 mg/l
<i>OptiG</i>	Fluid Loss control Additive	1.0-4.0 ppb
<i>Lime</i>	Alkalinity Additive	5 ppb
<i>NewCarb M</i>	Loss Circulation Material	10.0 ppb
<i>NewCarb F</i>	Loss Circulation Material	As required
<i>DynaFiber</i>	Loss Circulation Material	As required



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**OILFIELD WASTE MANAGEMENT PROPOSAL**

For

**Questar Market Resources**

**SOLI-BOND® Processing and Disposal of Drilling Waste**

**Batch Treatment**

**Wells: GH 7D-19-8-21**

**SWNE Section 19**

**T8S – R21E**

**Uintah County, Utah**

**Prepared For: Jon Gent**  
**Region Drilling Manager**  
**Questar Market Resources**  
**1050 17<sup>th</sup> Street, Suite 500**  
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**(303) 672-6927**

**Prepared By: Robert J. Wilson**  
**Technical Sales Representative**  
**Soli-Bond, Inc.**  
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SOLI-BOND® Processing and Disposal of Drilling Waste  
BATCH TREATMENT  
QUESTAR • GH 7D-19-8-21  
Uintah County, Utah

**OVERVIEW**

Soli-Bond, Inc. (SBI) proposes to utilize the SOLI-BOND® Process for the treatment of **Drilling Waste** on the **GH 7D-19-8-21** in Uintah County, Utah, which will be followed by onsite disposal of the processed material.

This proposal will serve to delineate the specifications and criteria for achieving the project objectives as required by **Questar Market Resources** (Client) and the appropriate regulatory entities.

**GENERAL DESCRIPTION OF THE SOLI-BOND® PROCESS**

The SOLI-BOND® Process involves the controlled addition of a non-toxic, chemically reactive, portland-cement-based reagent or reagents to a waste, followed by the mixing of the reagent with the waste to form homogeneous slurry similar to viscous mortar. Oily substances that may be present in the waste are broken up into small droplets or particles and dispersed throughout the reagent/waste mixture during the mixing phase of the process. After the mixing phase, an irreversible chemical reaction begins to occur between the reagent and water present (or added) in the waste, ultimately causing the reagent/waste mixture to be transformed into a solid granular material with a “soil-like” consistency, typically within 48 hours after processing. Any dispersed particles of oily substances within the processed material are *physically* locked in place or “micro-encapsulated” in their isolated state inside the reacted cementitious matrix, preventing them from re-coalescing and suddenly being released to the environment at significant rates. The same irreversible reaction *chemically* stabilizes various metals that may be present in the waste, primarily by transforming them into less soluble metal hydroxides and other chemical species, thus greatly reducing their mobility and availability to the surrounding environment as well. In summary The SOLI-BOND® Process reduces the leaching rate of target constituents of concern from a waste form to such a degree that they can no longer cause harm to health or the environment. The SOLI-BOND® Process is a waste treatment method more generally known as Solidification/Stabilization (S/S). S/S has been recognized and prescribed by the United States Environmental Protection Agency for many years as an effective technology for the treatment of waste containing various metals as well as non-volatile and semi-volatile organic substances.

**INNOCUOUS WASTE APPLICATIONS**

The SOLI-BOND® Process can also be applied to solidify innocuous oilfield wastes such as spent water based drilling fluids and physically unstable water based drill cuttings to avoid the increased difficulties typically associated with the disposal of liquid or semi-solid wastes. Irreversibly transforming the *physical* properties of an innocuous waste, from a liquid or semi-solid state that’s structurally unstable, into a solid, granular material with load bearing capability can be the sole reason for using The SOLI-BOND® Process. In addition, the chemically driven transformation into a dry solid occurs quickly, with minimal volume addition and the process can accommodate waste with high fluid content. For oilfield waste pit applications, the process provides more rapid solidification of the pit contents, more room for the prescribed depth of soil cover and can greatly reduce the waiting period for the pit contents to dry sufficiently for pit closure as opposed to that required for conventional closure methods.

SOLI-BOND® Processing and Disposal of Drilling Waste  
BATCH TREATMENT  
QUESTAR • GH 7D-19-8-21  
Uintah County, Utah

**SITE AND APPLICATION DESCRIPTION**

The subject work site is an area constructed for the drilling and production of the gas well covered in this proposal. The well plan contemplates the use of an oilbase drilling fluid during the drilling of the production section of the well. As this section of the well is drilled, cuttings will be generated, transported to the surface within the drilling fluid, then mechanically separated from the drilling fluid as waste. These separated cuttings are expected to contain elevated levels of adhered/absorbed hydrocarbons due to their prior contact with the oilbase drilling fluid. These “oilbase cuttings” will be collected in steel catch tanks provided by the Client as drilling progresses and then placed in the separate oil base cuttings pit.

In addition to the “oilbase cuttings” described above, oily waste fluids and sediments may be generated at the work site during drilling operations and after drilling is completed the drilling fluid containment system will be cleaned thus generating some oily cleaning waste as well. It is these oilbase cuttings, waste fluids and sediments and cleaning waste that comprise all the waste to be treated and disposed of under this proposal.

Based on Client information and allowing for well bore washout, decompression/expansion of the drilled cuttings and the adhered/absorbed drilling fluids (“WEF”), the total volume of waste to treat was estimated as follows:

**GH 7D-19-8-21**

<b>4,650 feet of 6.125 inch diameter hole x WEF factor of 3:</b>	<b>508</b>
<b>Estimated additional sediments and cleaning waste:</b>	<b><u>10,500</u></b>
<b>Total Estimated Barrels of Waste to Treat:</b>	<b>11,008</b>

SBI proposes to apply the SOLI-BOND® Process to the oilbase cuttings and other indicated waste from the well during drilling operations to achieve the following objectives:

- Permanently reduce the leaching rate of target constituents of concern from the treated material to within prescribed limits.
- Irreversibly solidify the physically unstable waste to allow onsite disposal and support of soil cover without subsidence.
- Accomplish treatment with minimal volume addition to minimize disposal cell size and facilitate required minimum space for soil cover.
- Achieve rapid solidification of the waste to allow prompt final disposal.

**PRELIMINARY ACTIVITIES**

SBI personnel collected a sample of waste similar in characteristics to the waste to be generated on the subject project. The waste sample was used to conduct bench scale SOLI-BOND® processing, which has been carried out to determine effective reagent formulations, reagent/waste mix ratios, pricing and other aspects of this proposal.

**OPERATIONAL PLAN**

SBI jobsite operations will be conducted as follows:

SOLI-BOND® Processing and Disposal of Drilling Waste  
**BATCH TREATMENT**  
QUESTAR • GH 7D-19-8-21  
Uintah County, Utah

- After drilling the oilbase section of the well, SBI will install the SOLI-BOND® Waste Processing System at the well site. The “oilbase cuttings” will be treated “in-situ” in the existing lined pit.
- SBI will mobilize personnel to the jobsite to process the waste that has accumulated in the lined oil base cuttings pit.
- Upon arrival at the jobsite, the SBI Site Foreman will conduct a Jobsite Safety Assessment with SBI crew, discussing all potential jobsite safety hazards, required personal safety gear and accident avoidance and conduct safety meetings with SBI crew prior to each day’s work throughout the project.
- SBI and Client Representative will verify the volume of waste to treat in each batch prior to process operations.
- SBI crew will then process the waste with the SOLI-BOND® Waste Processing System.
- Waste processing will be preformed during eight (8) hour daylight shifts. After daily onsite process operations are completed SBI personnel will prepare a SBI field ticket for Client Representative signature, indicating the volume of waste processed (in barrels).
- Components of The SOLI-BOND® Waste Processing System may remain at the jobsite until all waste to treat has been processed.
- After all waste is processed from the well, a composite sample of the processed material will be collected for laboratory analysis to verify that it complies with criteria under the section herein entitled “Performance Criteria.”
- SBI will utilize the existing lined pit as an on-site disposal cell sized to accommodate the processed oilbase cuttings and four (4) feet of soil cover after final reclamation of the drill site. Client has provided a plastic liner for the disposal cell, including installation. After achievement of performance criteria is verified, SBI will backfill the cell to the adjacent surface elevation thus constituting final disposal of the processed material. SBI will then demobilize equipment and personnel thus concluding SBI’s onsite operations.
- A SBI Waste Treatment and Disposal Report suitable for submittal to the appropriate regulatory agencies will then be prepared documenting all pertinent aspects of the project and will be submitted to the Client.

**PERFORMANCE CRITERIA**

The treated waste will comply with the following criteria:

1. Leachable Oil and Grease less than 10 mg/L.
2. Leachable Total Dissolved Solids to be less than 5000 mg/L and/or leachable salts below acceptable site-specific guidelines.

Compliance with the performance criteria will be certified by an accredited testing laboratory utilizing the appropriate tests as prescribed and will be documented in a final report submitted to Client and the appropriate regulatory agencies as required.

**SCHEDULE** (All time/days are estimates and may change due to jobsite conditions)



SOLI-BOND® Processing and Disposal of Drilling Waste  
**BATCH TREATMENT**  
QUESTAR • GH 7D-19-8-21  
Uintah County, Utah

<b>ITEM / SERVICE</b> (Based on estimated 11,008 total barrels of waste to process)	<b>ESTIMATED DAYS</b>
Mobilization And Setup	1
Estimated SOLI-BOND® PWD Waste Processing System Rental Days	15
Process Material, Backfill Cell	12
Takedown and Demobilization	1

**ITEMS FURNISHED with SOLI-BOND® PWD Waste Processing System**

**Equipment**

- SB-2-7 Processor
- SOLI-BOND® Reagent Storage Silo w/ Discharge Auger
- Back Hoe Loader
- Ancillary Equipment
- First Aid and Safety Equipment
- SBI Crew Transportation

**Personnel**

- *SBI Site Foreman*
- *SBI Operator Material*
- Fuel necessary to operate Soli-Bond's motorized equipment.

**Miscellaneous**

- SBI Equipment Cleaning.
- One Laboratory Analysis of Processed Material. (for parameters indicated herein)
- SBI Waste Treatment and Disposal Report.

**CLIENT RESPONSIBILITY**

- Client will provide SBI with a written work order or other Client recognized document to contract SBI to perform the work as described herein.
- Client will provide SBI with a list of any Client requirements related to performing and being compensated for the work described herein.
- Client will provide "all weather" ingress and egress to the site.
- Client will provide process add-mix water.
- Client agrees that delays or interruptions in SBI's work described herein caused by "Acts of Nature" or events under the responsibility of the Client or Client contractors (excluding SBI and it's contractors) may result in additional charges to Client.

# QUESTAR EXPLR. & PROD.

GH #7D-19-8-21

LOCATED IN UINTAH COUNTY, UTAH  
SECTION 19, T8S, R21E, S.L.B.&M.

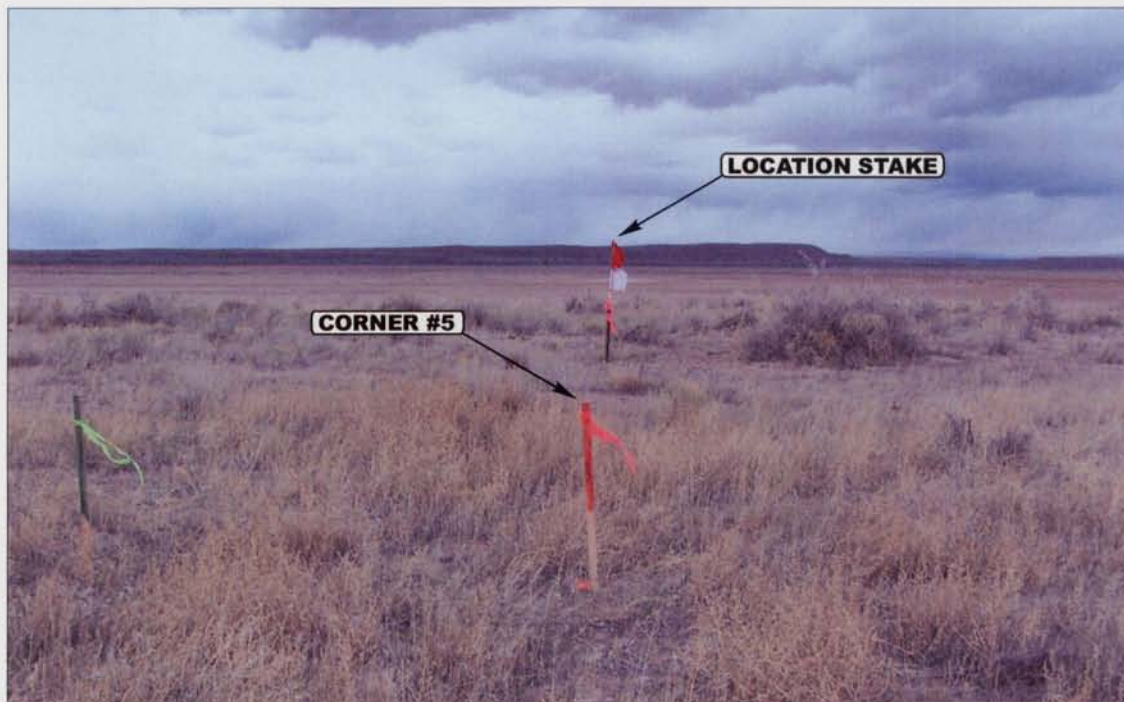


PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKE

CAMERA ANGLE: NORTHWESTERLY



PHOTO: VIEW FROM BEGINNING OF PROPOSED ACCESS

CAMERA ANGLE: WESTERLY



- Since 1964 -

UELS

Uintah Engineering & Land Surveying

85 South 200 East Vernal, Utah 84078  
435-789-1017 uels@uelsinc.com

LOCATION PHOTOS

04 10 06  
MONTH DAY YEAR

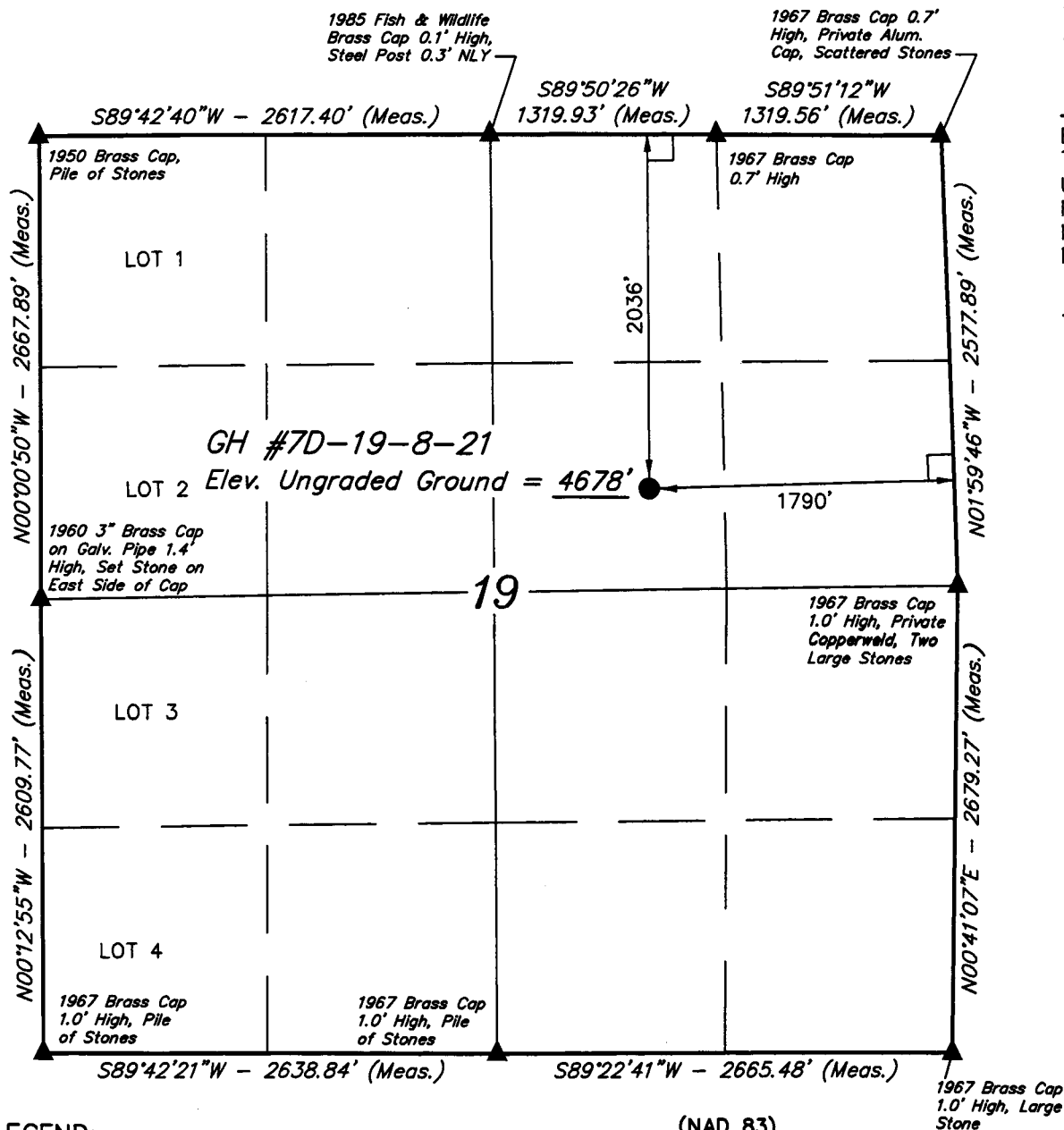
PHOTO

TAKEN BY: D.A.

DRAWN BY: LDK

REV: 08-31-08 C.C.

**T8S, R21E, S.L.B.&M.**



**LEGEND:**

- └─┘ = 90° SYMBOL
- = PROPOSED WELL HEAD.
- ▲ = SECTION CORNERS LOCATED.

(NAD 83)  
 LATITUDE = 40°06'36.68" (40.110189)  
 LONGITUDE = 109°35'38.61" (109.594058)  
 (NAD 27)  
 LATITUDE = 40°06'36.81" (40.110225)  
 LONGITUDE = 109°35'36.12" (109.593367)

**QUESTAR EXPLORATION & PRODUCTION**

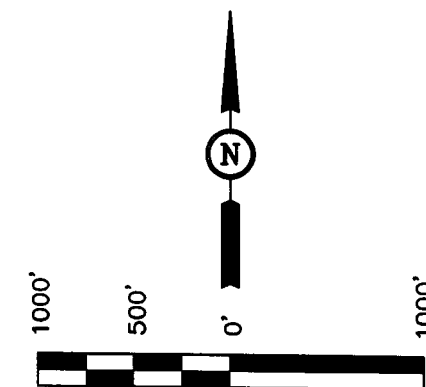
Well location, GH #7D-19-8-21, located as shown in the SW 1/4 NE 1/4 of Section 19, T8S, R21E, S.L.B.&M. Uintah County, Utah.

**BASIS OF ELEVATION**

BENCH MARK 20EAM LOCATED IN THE SE 1/4 OF SECTION 35, T8S, R21E, S.L.B.&M. TAKEN FROM THE OURAY SE, QUADRANGLE, UTAH, UINTAH COUNTY, 7.5 MINUTE QUAD. (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 4697 FEET.

**BASIS OF BEARINGS**

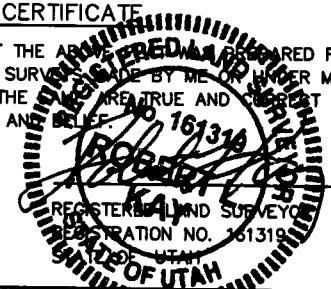
BASIS OF BEARINGS IS A G.P.S. OBSERVATION.



SCALE

**CERTIFICATE**

THIS IS TO CERTIFY THAT THE ABOVE MAP WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEY MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.



REVISED: 08-28-07 S.L.

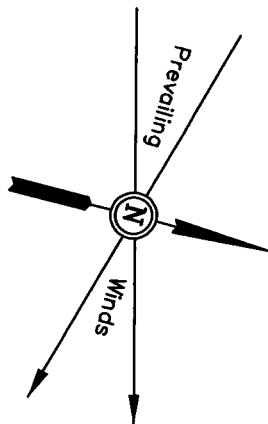
**UINTAH ENGINEERING & LAND SURVEYING**  
 85 SOUTH 200 EAST - VERNAL, UTAH 84078  
 (435) 789-1017

SCALE 1" = 1000'	DATE SURVEYED: 04-03-06	DATE DRAWN: 04-12-06
PARTY D.A. T.B. L.K.	REFERENCES G.L.O. PLAT	
WEATHER COOL	FILE QUESTAR EXPLORATION & PRODUCTION	

**FIGURE #1**

**GH #7D-19-8-21**

2036' FNL 1790' FEL



Approx.  
Top of —  
Cut Slope

**NOTE:**

*Flare Pit is to be located  
a min. of 100' from the  
Well Head.*

F-3.2'  
El. 74.5'

A circular professional seal for a Registered Land Surveyor in the State of Utah. The outer ring contains the text "REGISTERED LAND SURVEYOR" at the top and "STATE OF UTAH" at the bottom. Inside the ring, the text "No. 161319" is on the left and "ROBERT KAY" is on the right. The seal is stamped over a document, with some handwritten lines and numbers visible.

Approx.  
Toe of  
Fill Slope

El. 80.2'  
C-22.5'  
(Btm. Pit)

*Reserve Pit Backfill  
& Spoils Stockpile*

**Total Pit Capacity  
W/2' of Freeboard  
= 24,010 Bbls. ±  
Total Pit Volume  
= 6,190 Cu. Yds.**

El. 78.2'  
C-20.5'  
(Btm. Pit)

**NOTES:**

Elev. Ungraded Ground At Loc. Stake = 7678.2'  
FINISHED GRADE ELEV. AT LOC. STAKE = 4677.7'

**UINTAH ENGINEERING & LAND SURVEYING**  
85 So. 200 East \* Vernal, Utah 84078 \* (435) 789-1017

# QUESTAR EXPLR. & PROD.

## TYPICAL CROSS SECTIONS FOR

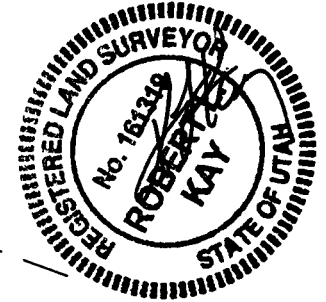
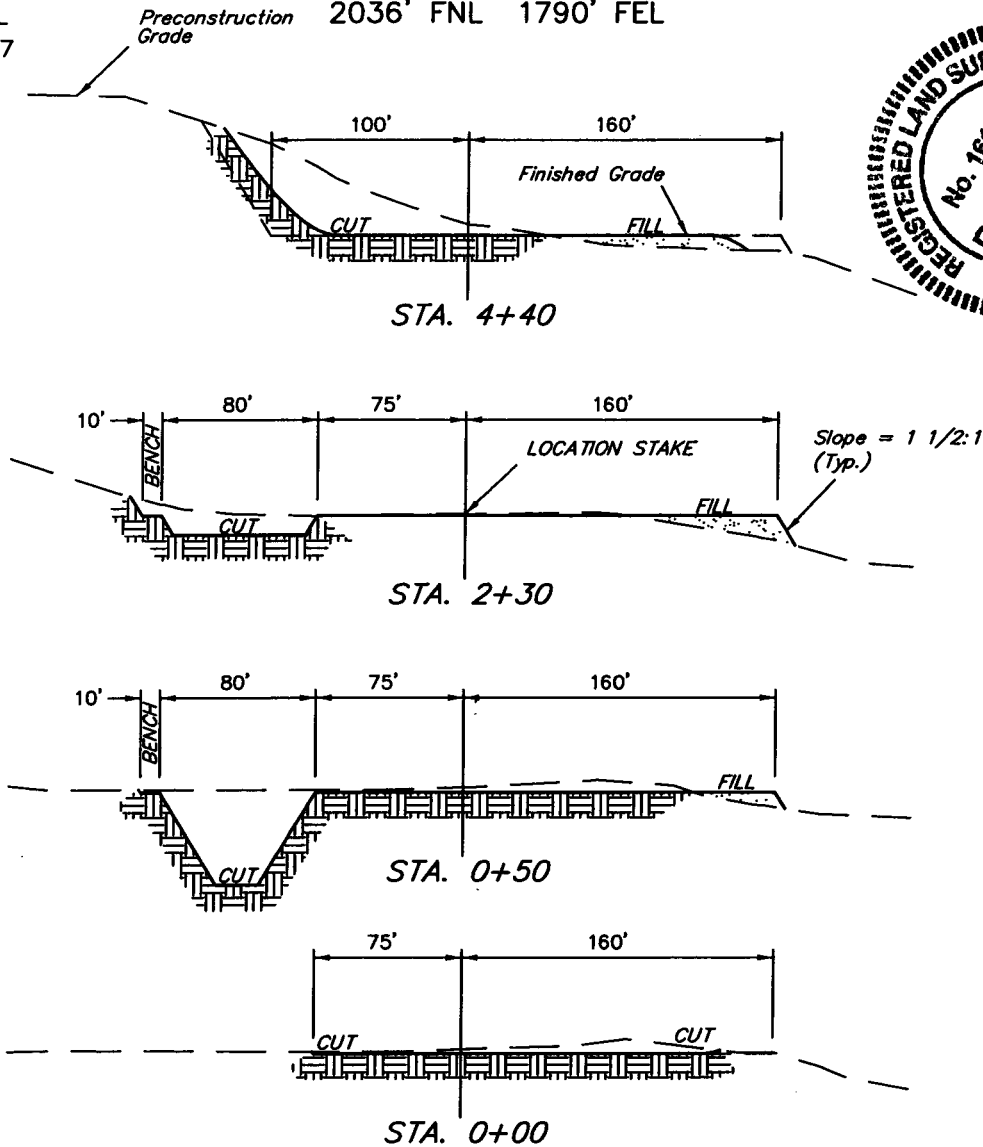
GH #7D-19-8-21

SECTION 19, T8S, R21E, S.L.B.&M.

2036' FNL 1790' FEL

FIGURE #2

1" = 20'  
X-Section  
Scale  
1" = 50'  
DATE: 08-28-07  
Drawn By: S.L.



### APPROXIMATE ACREAGES

WELL SITE DISTURBANCE = ± 3.192 ACRES  
ACCESS ROAD DISTURBANCE = ± 0.672 ACRES  
PIPELINE DISTURBANCE = ± 6.868 ACRES  
TOTAL = ± 10.732 ACRES

\* NOTE:  
FILL QUANTITY INCLUDES  
5% FOR COMPACTION

### NOTE:

Topsoil should not be  
Stripped Below Finished  
Grade on Substructure Area.

### APPROXIMATE YARDAGES

CUT  
(6") Topsoil Stripping = 2,660 Cu. Yds.  
Remaining Location = 8,830 Cu. Yds.  
TOTAL CUT = 11,490 CU.YDS.  
FILL = 5,730 CU.YDS.

EXCESS MATERIAL = 5,760 Cu. Yds.  
Topsoil & Pit Backfill = 5,760 Cu. Yds.  
(1/2 Pit Vol.)  
EXCESS UNBALANCE = 0 Cu. Yds.  
(After Interim Rehabilitation)

UINTAH ENGINEERING & LAND SURVEYING  
85 So. 200 East \* Vernal, Utah 84078 \* (435) 789-1017

QUESTAR EXPLR. & PROD.

INTERIM RECLAMATION PLAN FOR

GH #7D-19-8-21

SECTION 19, T8S, R21E, S.L.B.&M.

2036' FNL 1790' FEL

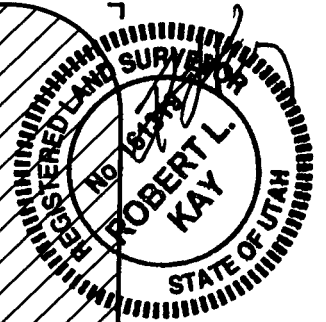
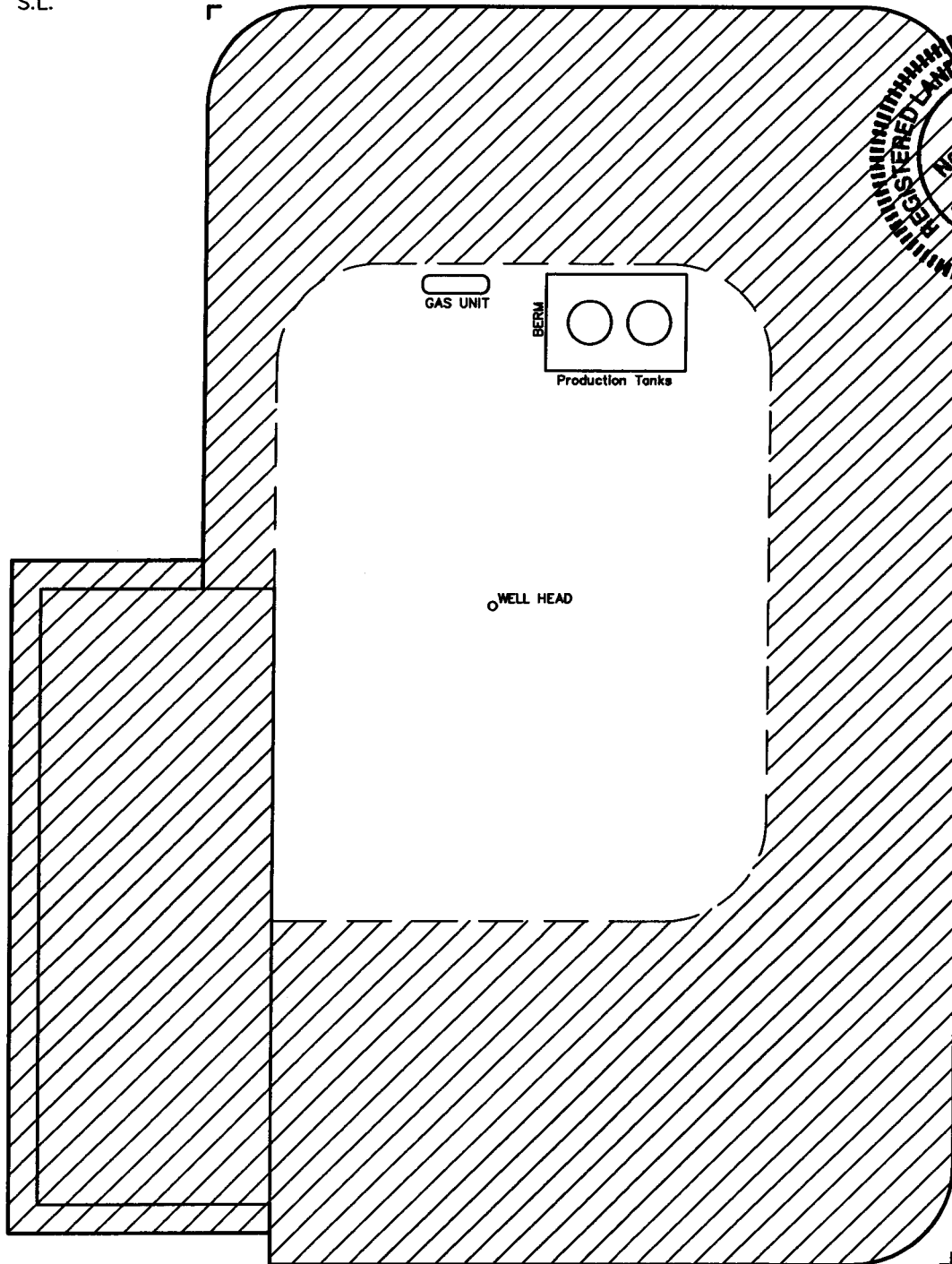
FIGURE #3



SCALE: 1" = 60'

DATE: 08-28-07

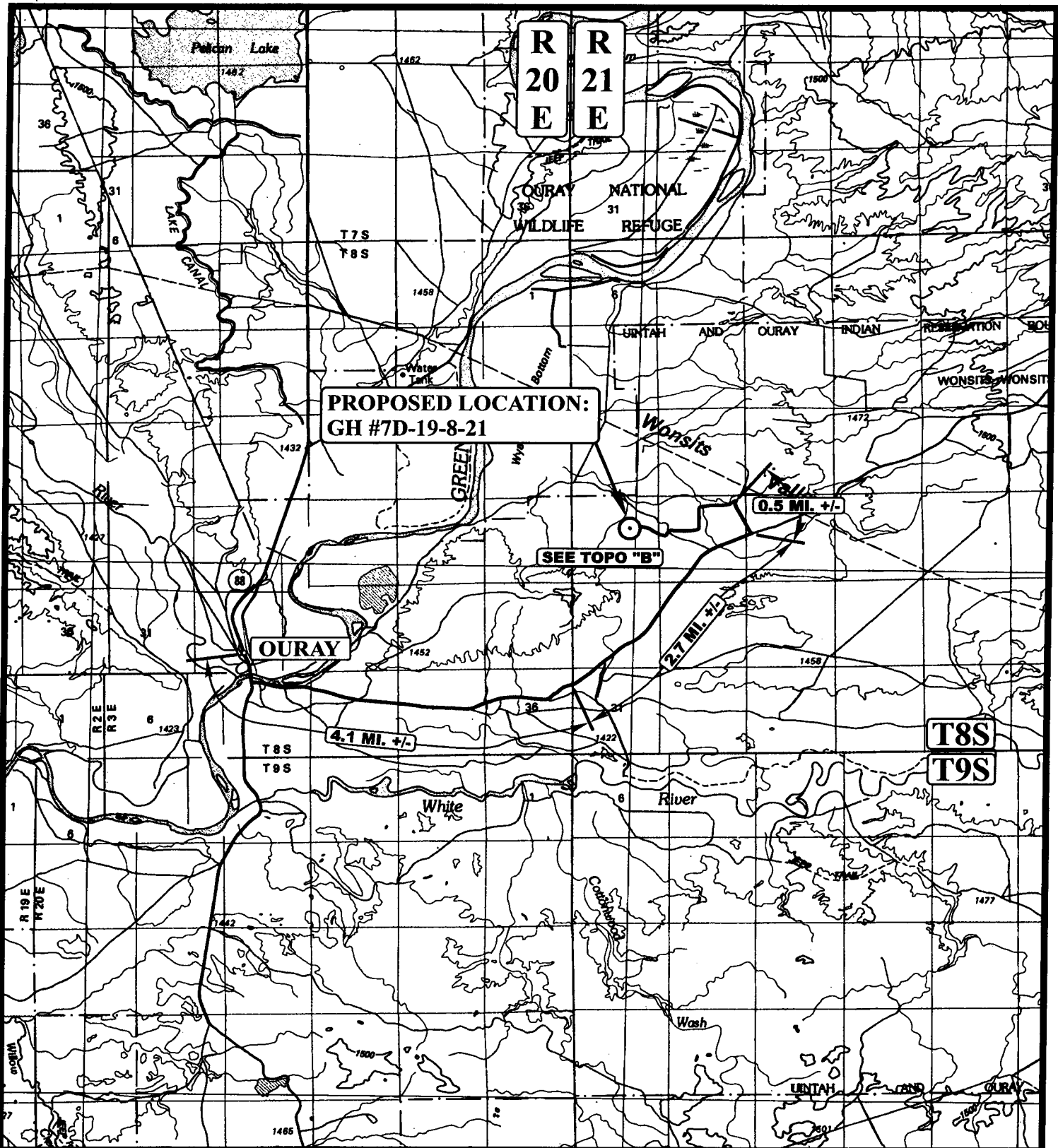
Drawn By: S.L.



 INTERIM RECLAMATION

UINTAH ENGINEERING & LAND SURVEYING  
85 So. 200 East \* Vernal, Utah 84078 \* (435) 789-1017





# LEGEND:

○ PROPOSED LOCATION



# QUESTAR EXPLR. & PROD.

GH #7D-19-8-21  
SECTION 19, T8S, R21E, S.L.B.&M.  
2036' FNL 1790' FEL



Uintah Engineering & Land Surveying  
85 South 200 East Vernal, Utah 84078  
(435) 789-1017 \* FAX (435) 789-1813

TOPOGRAPHIC  
MAP

04 10 06  
MONTH DAY YEAR

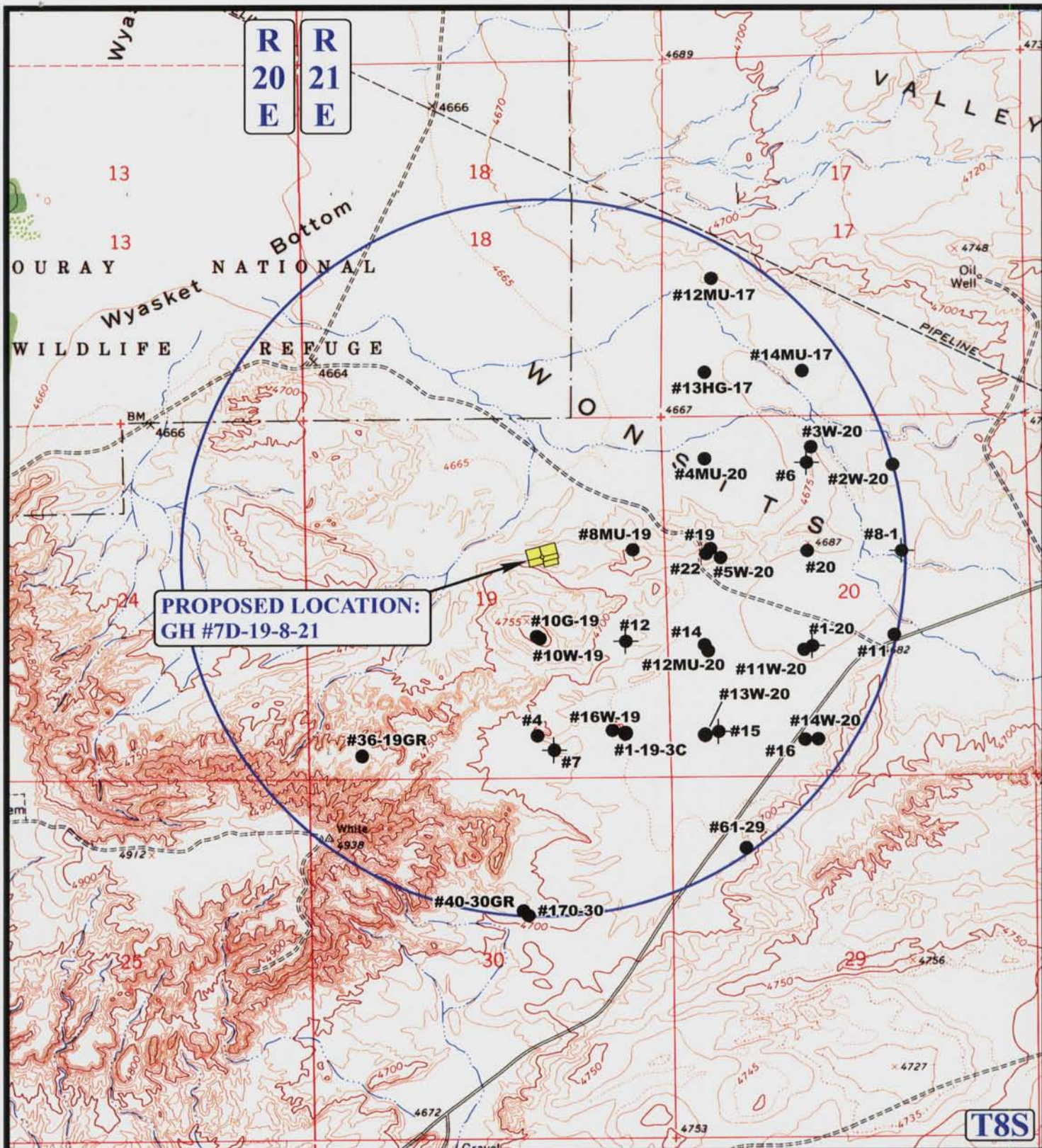
SCALE: 1:100,000 DRAWN BY: LDK REV: 08-31-07 C.C.











# **LEGEND:**

- DISPOSAL WELLS
- PRODUCING WELLS
- SHUT IN WELLS
- WATER WELLS
- ABANDONED WELLS
- TEMPORARILY ABANDONED



**Uintah Engineering & Land Surveying**  
85 South 200 East Vernal, Utah 84078  
(435) 789-1017 \* FAX (435) 789-1813



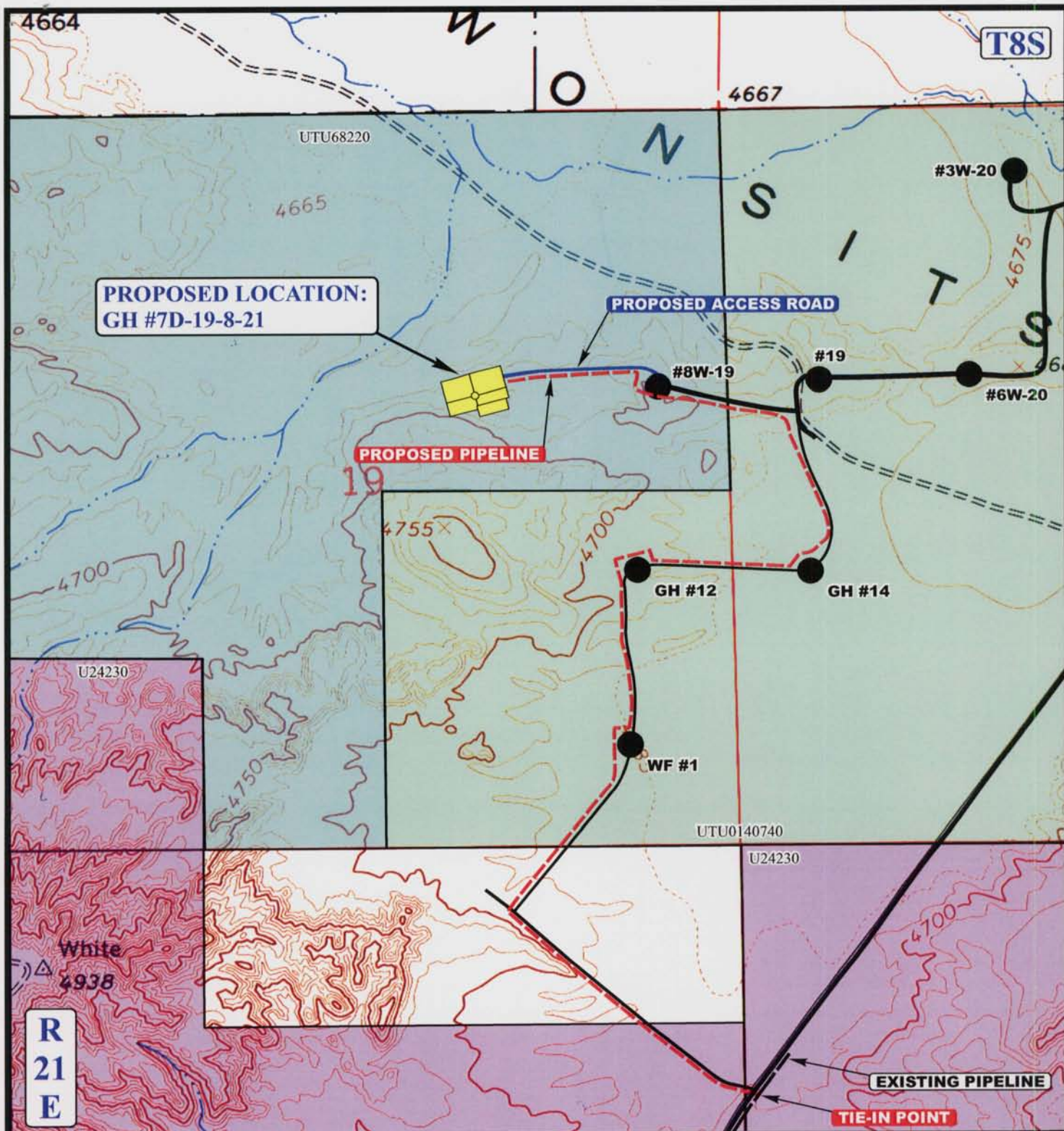
**TOPOGRAPHIC**  
**MAP**

**04 10 06**  
MONTH DAY YEAR

**SCALE: 1" = 2000'** **DRAWN BY: LDK** **REV: 08-31-07 C.C.**







APPROXIMATE TOTAL PIPELINE DISTANCE = 9,899' +/-

**LEGEND:**

- PROPOSED ACCESS ROAD
- EXISTING PIPELINE
- - - PROPOSED PIPELINE

**QUESTAR EXPLR. & PROD.**

GH #7D-19-8-21  
SECTION 19, T8S, R21E, S.L.B.&M.  
2036' FNL 1790' FEL



**Utah Engineering & Land Surveying**  
85 South 200 East Vernal, Utah 84078  
(435) 789-1017 \* FAX (435) 789-1813



**TOPOGRAPHIC  
MAP**

**04 10 06**  
MONTH DAY YEAR

SCALE: 1" = 1000' DRAWN BY: LDK REV: 08-31-07 C.C.

**D  
TOPO**

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

**SUNDRY NOTICES AND REPORTS ON WELLS**

**Do not use this form for proposals to drill or reenter an abandoned well. Use Form 3160-3 (APD) for such proposals.**

FORM APPROVED  
OMB No. 1004-0135  
Expires July 31, 1996

5. Lease Serial No.  
**UTU - 68220**

6. If Indian, Allottee or Tribe Name  
**UTE TRIBE**

7. If Unit or CA/Agreement, Name and/or No.  
**GYPSUM HILLS**

8. Well Name and No.  
**GH 7D-19-8-21**

9. API Well No.  
**43-047-38267**

10. Field and Pool, or Exploratory Area  
**GYPSUM HILLS**

11. County or Parish, State  
**UINTAH**

**SUBMIT IN TRIPlicate - Other instructions on reverse side**

1. Type of Well

☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator

**Questar Exploration & Production Company**

**Contact: Jan Nelson**

3a. Address

**11002 East 17500 South, Vernal, UT 84078**

3b. Phone No. (include area code)

**435-781-4331**

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

**2036' FNL 1790' FEL, SWNE, SECTION 19, T8S, R21E**

**12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA**

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	<b>APD EXTENSION</b>
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operations (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Questar Exploration & Production Company hereby requests a one year extension for GH 7D-19-8-21.

BLM APD approval date: 01/18/2007

RECEIVED

DEC 28 2007

DIV. OF OIL, GAS & MINING

CONDITIONS OF APPROVAL ATTACHED

RECEIVED  
VERNAL FIELD OFFICE  
2007 NOV 26 PM 3:54  
BUREAU OF LAND MGMT.  
DEPT. OF THE INTERIOR

14. I hereby certify that the foregoing is true and correct

Name (Printed/Typed)

**Laura Bills**

Signature

*Laura Bills*

Title

**Regulatory Affairs**

Date

**November 26, 2007**

Approved by

*Mark Baker*

Title

**Petroleum Engineer**

Date

**DEC 03 2007**

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on reverse)

UDOGM

CONFIDENTIAL

**Application for Permit to Drill  
Request for Permit Extension  
Validation**

(this form should accompany the Sundry Notice requesting permit extension)

**API:** 43-047-38267  
**Well Name:** GH 7D-19-8-21  
**Location:** 2036' FNL 1790' FEL, SWNE, SEC. 19, T8S, R21E  
**Company Permit Issued to:** Questar Exploration & Production Co.  
**Date Original Permit Issued:** 1/18/2007

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision.

Following is a checklist of some items related to the application, which should be verified.

If located on private land, has the ownership changed, if so, has the surface agreement been updated? Yes ☐ No ☒

Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location? Yes ☐ No ☒


Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well? Yes ☐ No ☒

Have there been any changes to the access route including ownership, or right-of-way, which could affect the proposed location? Yes ☐ No ☒

Has the approved source of water for drilling changed? Yes ☐ No ☒

Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation? Yes ☐ No ☒

Is bonding still in place, which covers this proposed well? Yes ☒ No ☐

  
Signature

11/26/2007

Date

Title: Regulatory Affairs

Representing: Questar Exploration & Production Co.

# **CONDITIONS OF APPROVAL**

## **QEP Uinta Basin Inc.**

### **Notice of Intent APD Extension**

**Lease:** UTU-68220  
**Well:** GH 7D-19-8-21  
**Location:** SWNE 19-T8S-R21E

An extension for the referenced APD is granted with the following conditions:

---

1. The extension and APD shall expire on 1/18/09
2. No other extension shall be granted.

If you have any other questions concerning this matter, please contact Matt Baker of this office at (435) 781-4490

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

**SUNDRY NOTICES AND REPORTS ON WELLS**

**Do not use this form for proposals to drill or reenter an abandoned well. Use Form 3160-3 (APD) for such proposals.**

FORM APPROVED  
OMB No 1004-0135  
Expires July 31, 1996

5. Lease Serial No.

UTU 68220

6. If Indian, Allottee or Tribe Name

UTE INDIAN TRIBE

7. If Unit or CA/Agreement, Name and/or No.

GYPSUM HILLS

8. Well Name and No.

GH 7D-19-8-21

9. API Well No.

43-047-38267

10. Field and Pool, or Exploratory Area

GYPSUM HILLS

11. County or Parish, State

UINTAH

**SUBMIT IN TRIPLICATE - Other Instructions on reverse side**

1. Type of Well

☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator

QUESTAR EXPLORATION & PRODUCTION, CO.

3a. Address

11002 E. 17500 S. VERNAL, UT 84078

3b. Phone No (include area code)

435-781-4331

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

2036' FNL 1790' FEL SWNE SECTION 19, T8S, R21E

**12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA**

**TYPE OF SUBMISSION**

**TYPE OF ACTION**

☒ Notice of Intent

☐ Subsequent Report

☐ Final Abandonment Notice

☐ Acidize

☐ Alter Casing

☐ Casing Repair

☒ Change Plans

☐ Convert to Injection

☒ Deepen

☐ Fracture Treat

☐ New Construction

☐ Plug and Abandon

☐ Plug Back

☐ Production (Start/Resume)

☐ Reclamation

☐ Recomplete

☐ Temporarily Abandon

☐ Water Disposal

☐ Water Shut-Off

☐ Well Integrity

☐ Other

13. Describe Proposed or Completed Operations (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once Testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

QUESTAR EXPLORATION & PRODUCTION COMPANY PROPOSES TO DEEPEN THE WELL FROM THE APPROVED TOTAL DEPTH OF 11,825' TO 17,020'. THE PROPOSED CHANGES REQUIRE A CHANGE IN CASING DESIGN AND CEMENT DESIGN. ATTACHED IS A NEW DRILLING PLAN SHOWING THE PROPOSED CHANGES.

Approved by the

Utah Division of  
Oil, Gas and Mining

FOR TECHNICAL QUESTIONS, PLEASE CONTACT JIM DAVIDSON, CHIEF DRILLING ENGINEER FOR QEP AT (303) 308-3090.

Date: 05-20-08

By: [Signature]

14. I hereby certify that the foregoing is true and correct

Name (Printed/Typed)

Jan Nelson

Signature

Title

Regulatory Affairs

Date

May 19, 2008

THIS SPACE FOR FEDERAL OR STATE USE

Approved by

Title

Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on reverse)

**COPY SENT TO OPERATOR**

Date: 5.21.2008

Initials: KS

Federal Approval of this  
Action is Necessary

**CONFIDENTIAL**



DRILLING PROGRAM

ONSHORE OIL & GAS ORDER NO. 1  
Approval of Operations on Onshore  
Federal Oil and Gas Leases

All lease and/or unit operations will be conducted in such a manner that full compliance is made with applicable laws, regulations (43 CFR 3100), Onshore Oil and Gas No. 1, and the approved plan of operations. The operator is fully responsible for the actions of his subcontractors. A copy of these conditions will be furnished the field representative to insure compliance.

1. **Formation Tops**

The estimated tops of important geologic markers are as follows:

<u>Formation</u>	<u>Depth</u>
Uinta	Surface
Green River	2,545'
Wasatch	6,020'
Mesaverde	9,295'
Sego	11,478'
Castlegate	11,795'
Blackhawk	12,123'
Mancos Shale	12,579'
Mancos B	13,003'
Frontier	15,709'
Dakota Silt	16,601'
Dakota	16,820'
TD	17,020'

2. **Anticipated Depths of Oil Gas Water and Other Mineral Bearing Zones**

The estimated depths at which the top and bottom of the anticipated water, oil, gas. Or other mineral bearing formations are expected to be encountered are as follows:

<u>Substance</u>	<u>Formation</u>	<u>Depth</u>
Gas	Wasatch	6,020'
Gas	Mesaverde	9,295'
Gas	Blackhawk	12,123'
Gas	Mancos Shale	12,579'
Gas	Mancos B	13,003'
Gas	Dakota	16,820'

All fresh water and prospectively valuable minerals encountered during drilling will be recorded by depth and adequately protected. All oil and gas shows will be tested to determine commercial potential.

DRILLING PROGRAM

All water shows and water-bearing sands will be reported to the BLM in Vernal, Utah. Copies of State of Utah form OGC-8-X are acceptable. If flows are detected, samples will be submitted to the BLM along with any water analyses conducted. Fresh water will be obtained from Wonsits Valley water right # A36125 (which was filed on May 7, 1964,) or Red Wash water right # 49-2153 (which was filed on March 25, 1960). It was determined by the Fish and Wildlife Service that any water right number filed before 1989 is not depleting to the Upper Colorado River System, to supply fresh water for drilling purposes. All water resulting from drilling operations will be disposed of at Red Wash Central Battery Disposal Site; SWSE, Section 27, T7S, R23E or Wonsits Valley Disposal Site; SWNW, Section 12, T8S, R21E.

**3. Operator's Specification for Pressure Control Equipment:**

- A. 13-5/8" 5000 psi double gate, 5,000 psi annular BOP (schematic included) from surface hole to 9-5/8" casing point. A 13-5/8" 10,000 psi double and single gate may be substituted based on contractor availability and substructure height of the drilling rig.
- B. 11" or 13-5/8" 10,000 psi double gate, 10,000 psi single gate, 10,000 psi annular BOP (schematic included) from 9-5/8" casing point to total depth. The choice of BOP stacks is based on the drilling contractor's availability.
- C. Functional test daily
- D. All casing strings shall be pressure tested (0.2 psi/foot or 1500 psi, whichever is greater) prior to drilling the plug after cementing; test pressure shall not exceed the internal yield pressure of the casing.
- E. Ram type preventers and associated equipment shall be tested to approved stack working pressure if isolated by test plug or to 50 percent of internal yield pressure of casing whichever is less. BOP and related equipment shall meet the minimum requirements of Onshore Oil and Gas Order No. 2 for equipment and testing requirements, procedures, etc..., for a 10M system and individual components shall be operable as designed.

ONSHORE OIL & GAS ORDER NO. 1  
 QUESTAR EXPLORATION & PRODUCTION COMPANY  
 GH 7D-19-8-21

DRILLING PROGRAM

4. **Casing Design:**

Hole Size	Csg. Size	Top (MD)	Bottom (MD)	Mud Weight	Wt. lb/ft	Grade	Thread	Cond.
26"	20"	sfc	40-60'	N/A	Steel	Cond.	None	Used
17-1/2"	13-3/8"	sfc	500'	N/A	54.5	K-55	STC	New
12-1/4"	9-5/8"	sfc	5,390'	9.2	47	HCP-110	Flush Jnt **	New
8-1/2"	7"	Surface	9,000'		26	HCP-110	LTC	New
8-1/2"	7"	9000'	12,650'	13.5	29 SDrift *	HCP-110	LTC	New
6-1/8"	4-1/2"	sfc	13,000'		15.1	P-110	LTC	New
6-1/8"	4-1/2"	13,000'	15,000'		15.1	Q-125	LTC	New
6-1/8"	4-1/2"	15,000'	17,020'	15.1	16.6	Q-125	LTC	New

Casing Strengths:				Collapse	Burst	Tensile (minimum)
13-3/8"	54.5 lb.	K-55	STC	1,130 psi	2,730 psi	547,000 lb.
9-5/8"	47 lb.	HCP-110	LTC	7,100 psi	9,440 psi	1,213,000 lb.
7"	26 lb.	HCP-110	LTC	7,800 psi	9,950 psi	693,000 lb.
7"	29 lb.*	HCP-110	LTC	9,200 psi	11,220 psi	797,000 lb.
4-1/2"	15.1 lb.	P-110	LTC	14,350 psi	14,420 psi	406,000 lb.
4-1/2"	15.1 lb.	Q-125	LTC	15,840 psi	16,380 psi	438,000 lb.
4-1/2"	16.6 lb.	Q-125	LTC	19,010 psi	18,130 psi	493,000 lb.

\* Special Drift

\*\* Flush Jnt – VAM SLIJ II or LT&C based on availability

**MINIMUM DESIGN FACTORS:**

COLLAPSE: 1.125

BURST: 1.10

TENSION: 1.80

DRILLING PROGRAM

Area Fracture Gradient: 0.9 psi/foot  
Maximum anticipated mud weight: 15.1 ppg  
Maximum surface treating pressure: 12,500 psi

**5. Cementing Program**

**20" Conductor:**

Cement to surface with construction cement.

**13-3/8" Surface Casing: sfc – 500' (MD)**

**Slurry:** 0' – 500'. 610 sks (731 cu ft) Premium cement + 0.25 lbs/sk Flocele + 2% CaCl<sub>2</sub>.  
Slurry wt: 15.6 ppg, slurry yield: 1.20 ft<sup>3</sup>/sk, slurry volume: 17-1/2" hole + 100% excess.

**9-5/8" Intermediate Casing: sfc – 5,390' (MD)**

**Lead Slurry:** 0' – 4,890'. 1407 sks (368 bbls) Foamed Lead 50/50 Poz cement + 0.1 % FDP-C766-05 (Low Fluid Loss Control) + 5 #/sx Silicate Compacted + 20 % SSA-1 + 0.1 % Versaset + 1.5 % Zonesalant 2000 (foamer) Slurry wt: 14.3 ppg, (unfoamed) or 11.0 ppg (foamed). Slurry yield: 1.47 ft<sup>3</sup>/sk (unfoamed), Slurry volume: 12-1/4" hole + 35% excess.

**Tail Slurry:** 4,890' – 5,390'. 115 sks (30 bbls) Tail 50/50 Poz cement + 0.1 % FDP-C766-05 (Low Fluid Loss Control) + 5 #/sx Silicate Compacted + 20 % SSA-1 + 0.1 % Versaset. Slurry wt: 14.3 ppg, Slurry yield: 1.47 ft<sup>3</sup>/sk, Slurry volume: 12-1/4" hole + 35% excess.

**7" Intermediate Casing: sfc - 12,650' (MD)**

**Foamed Lead Slurry 2:** 0' – 12,150'. 1415 sks (2080 cu ft) 0.1% HALAD-766 (Low Fluid Loss Control); Slurry Yield: 1.47 ft<sup>3</sup>/sk; 5 lbm/sk Silicalite Compacted (Light Weight Additive) Total Mixing Fluid: 6.40 Gal/sk; 20 % SSA-1 (Heavy Weight Additive); 0.1 % Versaset (Thixotropic Additive); 1.5 % FDP-C760-04 (Foamer) 35% excess.

**Tail Slurry:** 12,150' – 12,650'. 60 sks (79.3 cu ft) 0.1% HALAD-766 (Low Fluid Loss Control) Slurry Yield: 1.47 ft<sup>3</sup>/sk; 5 lbm/sk Silicalite Compacted (Light Weight Additive) Total Mixing Fluid: 6.40 Gal/sk; 20 % SSA-1 (Heavy Weight Additive); 0.1% Versaset (Thixotropic Additive); 1.5% FDP-C760-04 (Foamer).

**4-1/2" Production Casing: sfc - 17,020' (MD)**

**Lead/Tail Slurry:** 6,000' - 17,020'. 940 sks (1401 cu ft) Premium Cement + 17.5% SSA-1, + 4% Microbond HT, + 0.2% Halad 344 + 0.5% Halad 413, + 0.3% CFR-3, + 0.9% HR-12, + 0.2% Super CBL, + 0.2% Suspend HT, 17.5% SSA-2. Slurry wt: 16.2 ppg, Slurry yield: 1.49 ft<sup>3</sup>/sk, Slurry volume: 6-1/8" hole + 35% in open hole section.

\*Final cement volumes to be calculated from caliper log with an attempt to be made to circulate cement to the surface on the intermediate strings and 5,500' on the production string. A bond log will be run across the zone of interest and across zones as required by the authorized officer to insure protection of natural resources.

DRILLING PROGRAM

6. Auxiliary Equipment

- A. Kelly Cock – yes
- B. Float at the bit – yes
- C. Monitoring equipment on the mud system – visually and/or PVT/Flow Show
- D. Full opening safety valve on the rig floor – yes
- E. Rotating Head – yes  
If drilling with air the following will be used:
- F. Request for Variance

Drilling surface hole with air:

A variance from 43 CFR 3160 Onshore Oil and Gas Order #2, Section III Requirements, subsection E. Special Drilling Operations is requested for the specific operation of drilling and setting surface casing on the subject well with a truck mounted air rig. The variance from the following requirements of Order #2 is requested because surface casing depth for this well is 500 feet and high pressures are not expected.

1. **Properly lubricated and maintained rotating head** – A diverter system in place of a rotating head. The diverter system forces the air and cutting returns to the reserve pit and is used to drill the surface casing.
2. **Blooiie line discharge 100 feet from wellbore and securely anchored** – the blooiie line discharge for this operation will be located 50 to 70 feet from the wellhead. This reduced length is necessary due to the smaller location size to minimize surface disturbance.
3. **Automatic ignitor or continuous pilot light on blooiie line** – a diffuser will be used rather than an automatic pilot/ignitor. Water is injected into the compressed air and eliminates the need for a pilot light and the need for dust suppression equipment.
4. **Compressors located in the opposite direction from the blooiie line a minimum of 100 feet from the wellbore** – compressors located within 50 feet on the opposite side of the wellbore from the blooiie line and is equipped with a 1) emergency kill switch on the driller's console, 2) pressure relief valves on the compressors, 3) spark arrestors on the motors.

## DRILLING PROGRAM

- G. All other operations and equipment for air/gas drilling shall meet specifications in Onshore Order #2, Section III Requirements, subsection E. Special Drilling Operations and Onshore Order #1.

Surface hole will be drilled with air, air/mist, foam, or mud depending on hole conditions. Intermediate holes will be with water based drilling fluids consisting primarily of fresh water, bentonite, lignite, caustic, lime, soda ash and polymers. The production hole will be drilled with oil base mud (OBM). No chromates will be used. Maximum anticipated mud weight is 15.1 ppg.

No minimum quantity of weight material will be required to be kept on location.

PVT/Flow Show will be used from base of surface casing to TD.

Gas detector will be used from surface casing depth to TD.

### 7. Testing, logging and coring program

- A. Cores – none anticipated
- B. DST – none anticipated
- C. Logging – Mud logging – 4500' to TD  
GR-SP-Induction, Neutron Density, FMI
- D. Formation and Completion Interval: Mancos interval, final determination of completion will be made by analysis of logs.  
Stimulation – Stimulation will be designed for the particular area of interest as encountered.

### 8. Anticipated Abnormal Pressures and Temperatures, Other Potential Hazards

No abnormal temperatures or pressures are anticipated. No H<sub>2</sub>S has been encountered in or known to exist from previous wells drilled to similar depths in the general area. Maximum anticipated bottom hole pressure equals approximately 12,200 psi. Maximum anticipated bottom hole temperature is 315° F.

DRILLING PROGRAM

**9. Additional Information For Oil Base Mud**

- A. See attached diagram of well pad layout. A reserve pit will be constructed for this location. This pit will be constructed so that a minimum of two vertical feet of freeboard exists above the top of the pit at all times and at least one-half of the holding capacity will be below ground level. The pit will be lined with a synthetic reinforced liner, 30 millimeters thick, with sufficient bedding used to cover any rocks prior to putting any fluids into the pit. The pad will be designed so that runoff from adjacent slopes does not flow into the reserve pit. The liner will overlap the pit walls and be covered with dirt and/or rocks to hold it in place. At the beginning of drilling operations this reserve pit will have an open-ended dike placed in the pit that allows the fluids to migrate from one side of the pit to the other during the drilling of the surface and intermediate hole using water based mud. At the time that operations begin to drill the production hole with oil base mud, this dike will be extended, dividing the pit into two distinct, isolated halves allowing no migration of fluids from one side to the other. At that time all fluids will be removed from the end of the pit to be used as a cuttings pit. This cuttings pit will be used for oil based cuttings generated during drilling of the production hole.
- B. Oil-base mud will be mixed in the closed circulating system and transferred to four 500-bbl tanks on location for storage prior to and after drilling operations. Drip pans will be installed below the rotary beams on the substructure and can be viewed on site from the cellar area. As the production section of the hole is drilled, the cuttings transported to the surface with the drilling fluid will be mechanically separated from the drilling fluid as waste by two shale-shakers and then cleaned/dried via a mud cleaner and/or centrifuge. These separated cuttings will be collected in a steel catch tank once they leave the closed circulating system and transported and placed into the cuttings half of the reserve pit.
- C. Plastic material will underlay the rig, oil base mud/diesel storage tanks and mud pits. All tanks on location will be placed inside of berms. Any oily waste fluids and sediments generated at the work site during drilling operations or when cleaning the fluid containment system after drilling will also be placed into the cuttings half of the pit.
- D. All rig ditches will be lined and directed to a lined sump for fluid recovery. A drip pan will be installed on the BOP stack, a mud bucket will be utilized as needed on connections and a vacuum system will be used on the rig floor for fluid recovery in those areas.
- E. Once all waste has been placed in the cuttings portion of the pit and all necessary approvals obtained, the oilfield waste management consultant Soli-Bond or a similar company will mobilize equipment and personnel to the site to perform the cement



ONSHORE OIL & GAS ORDER NO. 1  
QUESTAR EXPLORATION & PRODUCTION COMPANY  
GH 7D-19-8-21

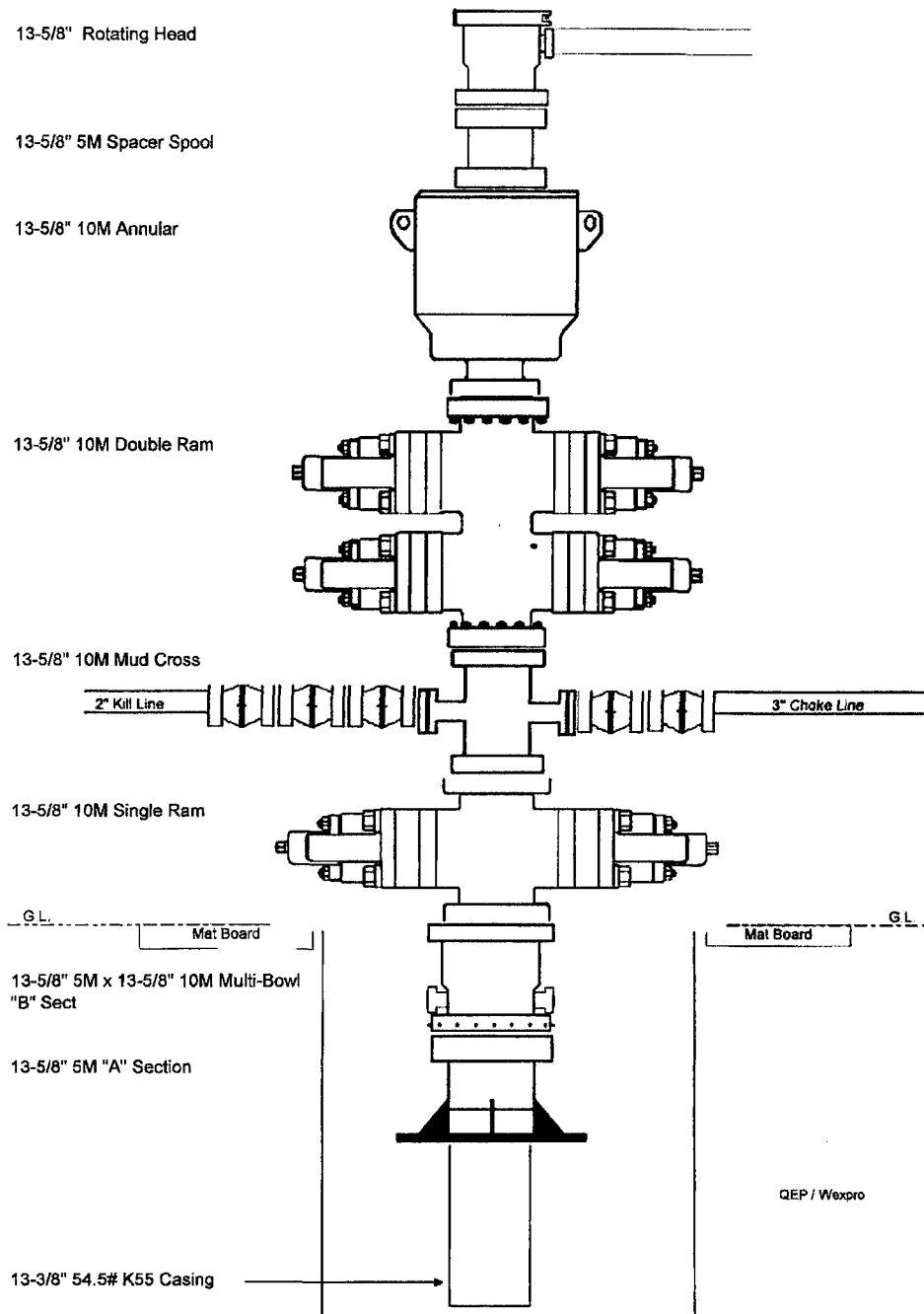
#### DRILLING PROGRAM

based solidification/stabilization process in-situ for encapsulation. Soil will be backfilled over the processed material used on the cuttings side of the pit and that portion of the pit area will be returned to the existing grade bordering the pit. Please see the attached Soli-Bond Proposal for Processing and Disposal of Drilling Waste for specific details. The half of the reserve pit containing water base materials will be left to evaporate and will be closed and reclaimed at the time that portion of the pit is dry.

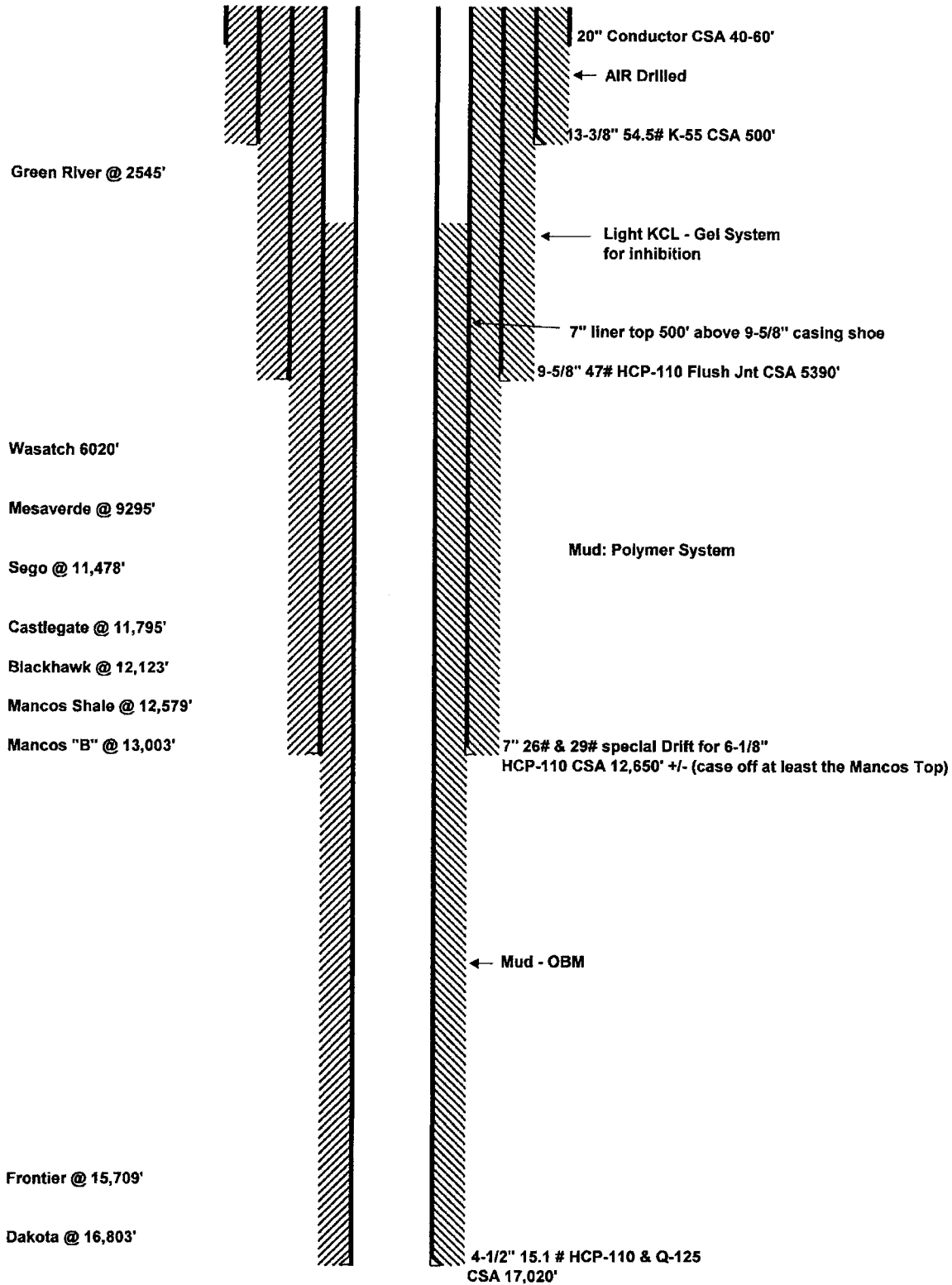
ONSHORE OIL & GAS ORDER NO. 1  
QUESTAR EXPLORATION & PRODUCTION COMPANY  
GH 7D-19-8-21

DRILLING PROGRAM

BOP Requirements:



# GH 7D-19-8-21



**DIVISION OF OIL, GAS AND MINING**

***SPUDDING INFORMATION***

Name of Company: QUESTAR EXPLORATION & PRODUCTION CO

Well Name: GH 7D-19-8-21

Api No: 43-047-38267 Lease Type: FEDERAL

Section 19 Township 08S Range 21E County UINTAH

Drilling Contractor PETE MARTIN DRLG RIG # RATHOLE

**SPUDDED:**

Date 06/07/08

Time 10:00 AM

How DRY

***Drilling will Commence:*** \_\_\_\_\_

Reported by RICK BUSH

Telephone # (307) 850-2092

Date 06/09//08 Signed CHD

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
Budget Bureau No. 1004-0135  
Expires: March 31, 1993

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir  
Use "APPLICATION FOR PERMIT--" for such proposals

***SUBMIT IN TRIPLICATE***

1. Type of Well

Oil

Gas

☐

Well

☒

Well

☐

Other

2. Name of Operator

**QUESTAR EXPLORATION & PRODUCTION CO.**

3. Address and Telephone No.

**11002 EAST 17500 SOUTH - VERNAL, UT 84078**

Contact: **Dahn.Caldwell@questar.com**

**435-781-4342 Fax 435-781-4357**

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

**2036' FNL, 1790' FEL, SWNE, SEC 19-T8S-R21E**

5. Lease Designation and Serial No.

**UTU-68220**

6. If Indian, Allottee or Tribe Name

**UTE TRIBE**

7. If Unit or CA, Agreement Designation

**GYPSUM HILLS**

8. Well Name and No.

**GH 7D 19 8 21**

9. API Well No.

**43-047-38267**

10. Field and Pool, or Exploratory Area

**GYPSUM HILLS**

11. County or Parish, State

**UINTAH**

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

☐

Notice of Intent

☒

Subsequent Report

☐

Final Abandonment Notice

TYPE OF ACTION

☐

Abandonment

☐

Recompletion

☐

Plugging Back

☐

Casing Repair

☐

Altering Casing

☒

Other **SPUD**

☐

Change of Plans

☐

New Construction

☐

Non-Routine Fracturing

☐

Water Shut-Off

☐

Conversion to Injection

☐

Dispose Water

(Note) Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work)

**On 6/7/08 - Drilled 80' of 26" conductor hole. Set 80' of 20" conductor pipe. Cmted w/ Ready Mix.**

**RECEIVED**

**JUN 12 2008**

**DIV. OF OIL, GAS & MINING**

**3 - BLM, 2- Utah OG&M, 1 - Denver, 1 - file Word file-server**

14. I hereby certify that the foregoing is true and correct.

Signed

**Dahn F. Caldwell**

**Office Administrator II**

Date

**6/9/08**

(This space for Federal or State office use)

Approved by:

Title

Date

Conditions of approval, if any

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

OPERATOR: Questar Exploration & Production Co.  
ADDRESS: 11002 East 17500 South  
Vernal, Utah 84078 (435)781-4342

OPERATOR ACCT. No. N-5085

Action Code	Current Entity No.	New Entity No.	API Number	Well Name	QQ	SC	TP	RG	County	Spud Date	Effective Date
A	99999	16922	43-047-38267	GH 7D 19 8 21	SWNE	19	8S	21E	Uintah	6/7/08	6/19/08
WELL 1 COMMENTS: DKTA											
WELL 2 COMMENTS:											
WELL 3 COMMENTS:											
WELL 4 COMMENTS:											
WELL 5 COMMENTS:											

**CONFIDENTIAL**

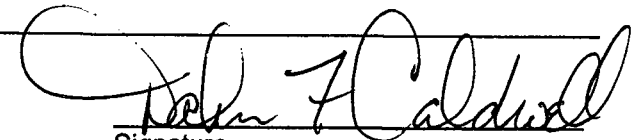
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JUN 12 2008  
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ACTION CODES (See instructions on back of form)

- A - Establish new entity for new well (single well only)
- B - Add new well to existing entity (group or unit well)
- C - Re-assign well from one existing entity to another existing entity
- D - Re-assign well from one existing entity to a new entity
- E - Other (explain in comments section)

NOTE: Use COMMENT section to explain why each Action Code was selected

(3/89)

  
Signature

Office Administrator II      6/9/08  
Title      Date

Phone No. (435)781-4342

**CONFIDENTIAL**

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
Budget Bureau No. 1004-0135  
Expires: March 31, 1993

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir

Use "APPLICATION FOR PERMIT--" for such proposals

***SUBMIT IN TRIPLICATE***

1. Type of Well

Oil

Gas

☐

Well

☒

Well

☐

Other

CONFIDENTIAL

2. Name of Operator

**QEP Uinta Basin, Inc.**

3. Address and Telephone No.

**11002 E 17500 S Vernal, Utah 84078-8526, (435) 781-4342**

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

**2036 FNL 1790 FEL, Section 19, T8S, R21E**

5. Lease Designation and Serial No.

**UTU-68220**

6. If Indian, Allottee or Tribe Name

**UTE TRIBE**

7. If Unit or CA, Agreement Designation

8. Well Name and No.

**GH 7D-19-8-21**

9. API Well No.

**43047382670000**

10. Field and Pool, or Exploratory Area

**GYPSUM HILLS**

11. County or Parish, State

**Uintah**

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

☐

Notice of Intent

☐

Subsequent Report

☐

Final Abandonment Notice

TYPE OF ACTION

☐

Abandonment

☐

Recompletion

☐

Plugging Back

☐

Casing Repair

☐

Altering Casing

☒

Other **Wildcat tax credit application**

☐

Change of Plans

☐

New Construction

☐

Non-Routine Fracturing

☐

Water Shut-Off

☐

Conversion to Injection

☐

Dispose Water

(Note) Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work)

**Questar requests that the wildcat tax credit be applied to the GH 7D-19-8-21 well. This is the first well in the Mancos / Dakota pool within a one mile radius (see attached map).**

APPROVED BY THE STATE  
OF UTAH DIVISION OF  
OIL, GAS, AND MINING

DATE: 10/15/08

BY: [Signature]

\* This is a preliminary determination only !!  
\*\* See attached statement of Basis  
CC: Tax Commission (emailed)

RECEIVED

JUL 25 2008

DIV. OF OIL, GAS & MINING

14. I hereby certify that the foregoing is true and correct.

Signed

Title

Sr. Geologist

Date

22 July 08

(This space for Federal or State office use)

Approved by:

Title

Date

Conditions of approval, if any

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.



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




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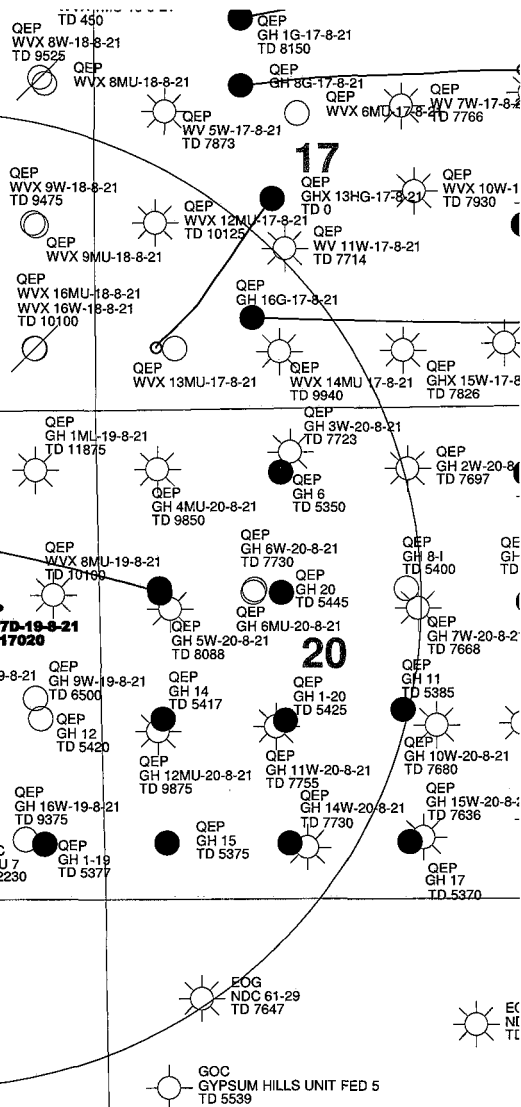
DIV. OF OIL, GAS &amp; MINING

1:24000

1000 0 1000 2000 3000 ft

## Well Status

-  D&A
-  GAS
-  LOC
-  OIL
-  SI



1050 17<sup>th</sup>, Suite 500  
 Denver, Colorado 80265  
 303 672-6900

**QUESTAR**  
 Exploration  
 & Production

GH 7D-19-8-21

Date: May 30, 2008

Geologist:

Landman:

Geophysicist:

Engineer:

File:...\Uinta\CJO\_RAGTaxCrAGH 7D-19-8-21

DIVISION OF OIL, GAS AND MINING  
**Preliminary Wildcat Well Determination**  
**STATEMENT OF BASIS**

**Applicant:** QEP Uinta Basin, Inc.

**Location:** SWNE Sec 19 T8S R21E, Uintah County, Utah

**WELL NAME:** GH 7D-19-8-21 **API #:** 43-047-38267

**FINDINGS**

1. This well is currently being drilled.
2. This well is > 1 mile from known production in the Mancos and Dakota formations.
3. Well GH 6-20-8-21 (API 43-047-38662), approximately 3474' from GH 7D-19-8-21, is also currently being drilled to the Dakota formation. (See attachment A).

**CONCLUSIONS**

Based on the findings above the Division has determined the GH 7D-19-8-21 well is planned to be drilled into an unknown area for the Mancos and Dakota formations. Therefore, should the well be productive, the well should qualify for the severance tax exemption under Section 59-5-102(2)(d) for wildcat wells. Upon final completion, the operator should apply to the division for a final determination. Any re-completion work done within the 12-month wildcat tax exemption period outside of the approved formation(s) will require re-evaluation. The new production may not qualify. This preliminary determination was made in accordance with Oil and Gas General Conservation Rule R649-3-35.

Reviewer(s): Dustin K. Doucet



Date: October 15, 2008

Joshua Payne

Date: October 13, 2008

## ATTACHMENT A

## 1 Mile Area of Review

API	WELL_NAME	Well Status	QTR	Sect	Town	Range	Cum Oil	Cum Gas	Field Type	Dx From Well (ft)	Rotary Spud	Date TD Reached	Date First Produced	Producing Formation
4304740352	GH 11C-20-8-21	APD	NESW	20	080S	210E	0	0	D	3672				Dakota (Proposed)
4304738662	GH 6-20-8-21	DRL	SENW	20	080S	210E	0	0	D	3474				Dakota
4304738660	WVX 9MU-18-8-21	APD	NESE	18	080S	210E	0	0	D	4215				Mesa Verde (Proposed)
4304738472	GH 14MU-19-8-21	LA	SESW	19	080S	210E	0	0	D	3114				
4304738270	GH 15MU-19-8-21	APD	SWSE	19	080S	210E	0	0	D	2751				Mesa Verde (Proposed)
4304738269	GH 12MU-19-8-21	APD	NWSW	19	080S	210E	0	0	E	3107				Mesa Verde (Proposed)
4304738268	GH 11MU-19-8-21	APD	NESW	19	080S	210E	0	0	D	1953				Mesa Verde (Proposed)
4304738267	GH 7D-19-8-21	DRL	SWNE	19	080S	210E	0	0	D	0				Dakota
4304738266	GH 6MU-19-8-21	APD	SENW	19	080S	210E	0	0	E	1552				Mesa Verde (Proposed)
4304738265	GH 5MU-19-8-21	APD	SWNW	19	080S	210E	0	0	E	2799				Mesa Verde (Proposed)
4304738264	GH 4MU-19-8-21	APD	NWNW	19	080S	210E	0	0	E	3107				Mesa Verde (Proposed)
4304738250	GH 3MU-19-8-21	APD	NENW	19	080S	210E	0	0	E	2020				Mesa Verde (Proposed)
4304738192	GH 2MU-19-8-21	APD	NWNE	19	080S	210E	0	0	D	1497				Mesa Verde (Proposed)
4304738191	WVX 16MU-18-8-21	APD	SESE	18	080S	210E	0	0	D	2929				Mesa Verde (Proposed)
4304738188	WVX 13MU-17-8-21	APD	SWSW	17	080S	210E	0	0	D	3778				Mesa Verde (Proposed)
4304735403	GH 11G-19-8-21	LA	NESW	19	080S	210E	0	0	D	1931				
4304735391	GH 10ML-18-8-21	PGW	NWSE	18	080S	210E	1834	167415	D	4134	6/29/2006		10/27/2006	Wasatch-Mesa Verde
4304735373	GH 9W-19-8-21	LA	NESE	19	080S	210E	0	0	D	1587				
4304735372	WVX 8MU-19-8-21	PGW	SENE	19	080S	210E	683	175874	D	1231	8/5/2004		9/8/2004	Wasatch-Mesa Verde
4304735371	WVX 16W-18-8-21	LA	SESE	18	080S	210E	0	0	E	2973				
4304735370	WVX 12MU-17-8-21	PGW	NWSW	17	080S	210E	155	119375	D	4766			5/18/2006	Wasatch-Mesa Verde
4304735369	WVX 14MU-17-8-21	PGW	SESW	17	080S	210E	1774	459469	D	4607	3/18/2004		5/4/2004	Wasatch-Mesa Verde
4304735325	GH 16W-19-8-21	OPS	SESE	19	080S	210E	0	0	D	2751				Mesa Verde (Proposed)
4304735324	GH 1ML-19-8-21	PGW	NENE	19	080S	210E	1735	130635	D	1805			8/19/2004	Wasatch-Mesa Verde
4304735323	GH 15ML-18-8-21	PGW	SWSE	18	080S	210E	5746	269576	D	2698			3/12/2007	Wasatch-Mesa Verde
4304735322	WVX 9W-18-8-21	LA	NESE	18	080S	210E	0	0	E	4262			3/23/2005	Wasatch
4304735097	GH 5W-20-8-21	PGW	SWNW	20	080S	210E	548	220705	D	2490				
4304735070	GH 13MU-20-8-21	PGW	SWSW	20	080S	210E	478	183161	D	3538			6/8/2006	Wasatch-Mesa Verde
4304735069	GH 12MU-20-8-21	PGW	NWSW	20	080S	210E	1344	370864	D	2882			5/4/2004	Wasatch-Mesa Verde
4304735068	GH 4MU-20-8-21	PGW	NWNW	20	080S	210E	820	180859	D	2794			8/30/2004	Wasatch-Mesa Verde
4304734723	GHX 13HG-17-8-21	POW	SWSW	17	080S	210E	39592	3756	D	3645			7/3/2003	Green River
4304734334	GH 11W-20-8-21	PGW	NESW	20	080S	210E	1040	385285	D	3926			2/25/2002	Wasatch
4304734332	GH 7W-20-8-21	PGW	SWNE	20	080S	210E	990	358629	D	5255			8/9/2002	Wasatch
4304734331	GH 6W-20-8-21	LA	SENW	20	080S	210E	0	0	D	3522				
4304734329	GH 3W-20-8-21	PGW	NENW	20	080S	210E	784	179377	D	4277			3/27/2003	Wasatch
4304733915	GH 14W-20-8-21	PGW	SESW	20	080S	210E	1279	452867	D	4740			4/23/2001	Wasatch
4304733566	GH 10G-19-8-21	POW	NWSE	19	080S	210E	51789	22031	D	1078			7/11/2000	Green River
4304733528	GH 10W-19-8-21	PGW	NWSE	19	080S	210E	660	127072	D	1104			7/31/2000	Wasatch
4304732714	GYPSUM HILLS 22	LA	SWNW	20	080S	210E	0	0	D	2502				
4304732675	GH 16	POW	SESW	20	080S	210E	134395	54882	D	4555			7/15/1995	Wasatch
4304732652	GH 20	POW	SENW	20	080S	210E	94962	40475	D	3795			9/21/1995	Green River
4304732651	GH 19	POW	SWNW	20	080S	210E	42661	108609	D	2493			11/28/1995	Wasatch
4304732648	GH 15	WI	SWSW	20	080S	210E	13742	61241	D	3511			6/3/1995	Green River
4304732647	GH 14	POW	NWSW	20	080S	210E	111979	31157	D	2732			5/20/1995	Green River
4304732459	GH 11	POW	NWSE	20	080S	210E	118773	16636	D	5207			5/6/1995	Green River
4304732458	GH 12	WI	NESE	19	080S	210E	0	0	D	1696				Green River
4304731932	GH 8-I	WI	SWNE	20	080S	210E	0	0	D	5172			6/1/1991	Green River
4304731263	N DUCK CREEK 61-29	PGW	NWNW	29	080S	210E	225	691578	D	5150			1/28/1983	Wasatch
4304731065	GH 1-19	POW	SESE	19	080S	210E	168094	93980	D	2835			1/5/1982	Green River
4304731006	GH 1-20	WI	NESW	20	080S	210E	60332	59527	D	3983			9/24/1981	Green River
4304730808	N DUCK CREEK 36-19G	LA	SWSW	19	080S	210E	0	0	E	3884				
4304730102	GYPSUM HILLS U 7	PA	SWSE	19	080S	210E	0	0	D	2832				
4304730099	GH 6	WI	NENW	20	080S	210E	32544	8786	D	4104			2/1/1971	Green River
4304730028	GH 4	POW	SWSE	19	080S	210E	297942	276048	D	2594			9/14/1968	Green River

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## Operations Summary Report

Legal Well Name: GH 7D-19-8-21  
 Common Well Name: GH 7D-19-8-21  
 Event Name: DRILLING  
 Contractor Name: Unit Drilling Co.  
 Rig Name: UNIT

Start: 6/10/2008 Spud Date: 6/10/2008  
 Rig Release: End:  
 Rig Number: 328 Group:

Date	From - To	Hours	Code	Sub Code	Phase	Description of Operations
6/11/2008	06:00 - 10:00	4.00	LOC	2	DRLCON	RIG UP BUCKET RIG-DRILL 26" HOLE 90' DEEP-SET 20" PIPE AND CEMENT SAME- ACTUAL SPUD ON 6/10/08 AT 0700 HRS.
	10:00 - 01:00	15.00	DRL	9	DRLSUR	MOVE IN & RIG UP AIR RIG- DRILL 17 1/2" HOLE F/ 90' TO 570' (34' OF RAT HOLE)- BLOW DOWN HOLE- LAY DOWN PIPE
	01:00 - 03:00	2.00	CSG	2	CSGSUR	RUN 12 JOINTS OF 13 3/8", K-55, 54.5#, STC CASING-LAND CASING @ 536 FEET
	03:00 - 06:00	3.00	CMT	2	CSGSUR	CEMENT 13 38" CASING AS PER PROGRAM: PUMP 80 BBLs. CLEAR WATER-MIX & PUMP 102.4 BBLs. 15.8PPG LEAD SLURRY-DISPLACE W/ 74.9 BBLs. CLEAR WATER-BUMP PLUG W. 900 PSI-CHECK FLOATS (OK)-FULL RETURNS DURING JOB/ 25 BBLs. CEMENT TO SURFACE
7/2/2008	06:00 - 18:00	12.00	LOC	4	RDMO	RIG DOWN AND MOVE OUT BAR HOPPERS, CENTERFUGES, HOPPER HOUSE, SUCTION TANK, INTERMEDIATE TANK, KOOMY HOUSE, BOILER, GAS BUSTER, BRIDLE UP, RIG DOWN TUGGERS, READY DERRICK TO LAY OVER, LAY DERRICK OVER @ 15:00, ROLL UP CABLES, PULL CORDS TO PUMPS AND DRAW TOOL, (SET IN STALLION TO STRIP MW BACK TO 14.1 PPG FOR NEXT WELL)
7/3/2008	18:00 - 06:00	12.00	OTH		RDMO	IDLE UNTIL DAYLIGHT TO MOVE RIG
	06:00 - 18:00	12.00	LOC	4	RDMO	RIG DOWN FLOOR SUBS L/D WINDWALLS W/ CRANE REMOVE DERRICK OFF FLOOR REMOVE HYDR. UNIT LAY DOWN NEW LOCATIONS LINER MOVE BACK YARD MOTOR PACKAGE CHOKE HOUSE SHAKER PIT STAIRS GRASS HOPPER PUMPS SCR DERRICK OFF LOCATIONS @ 1700 HRS
7/4/2008	18:00 - 06:00	12.00	LOC	4	RDMO	WAIT ON DAY LIGHT
	06:00 - 20:00	14.00	LOC	4	RDMO	FINISHING MOVING RIG OFF OLD LOCATION @ 1530 HRS, OFFICE & CAMP WILL BE MOVED IN THE MORNING SET SUB STRUCTURE & MUD TANKS ON NEW LOCATION
7/5/2008	20:00 - 06:00	10.00	LOC	4	RDMO	WAIT ON DAY LIGHT
	06:00 - 18:00	12.00	LOC	4	RDMO	RIG UP SET DRAWWORKS, SET MOTOR PACKAGE 100% BACK YARD RIGGED UP PIN DERRICK TO FLOOR INSTALL DERRICK BOARD, RIG UP STAIRS TO RIG FLOOR, WIRE UP GENERATORS RIG UP TOP DRIVE SKID FILL WATER TANKS, SET FUEL TANK MOVE OIL BASE TANKS & SET UP ON NEW LOCATION MOVE OBM F/ OLD TO NEW LOCATION
7/6/2008	18:00 - 06:00	12.00	LOC	4	RDMO	WAIT ON DAY LIGHT
	06:00 - 20:00	14.00	LOC	4	RDMO	FINISHING RIGGING UP BACK YARD HOOK UP GRASS HOPPER RUN ENGINES STRING UP BLOCKS & PREPARE TO RAISE DERRICK
7/7/2008	20:00 - 06:00	10.00	LOC	4	RDMO	WAIT ON DAYLIGHT
	06:00 - 18:00	12.00	LOC	4	RDMO	FINISH HOOKING UP AIR & WATER LINES SPOOL DRILLING LINE ON TO DRUM PUT WRAPS ON DEAD LINE ANCHOR 30 MIN STRESS TEST ON DERRICK RAISE DERRICK PIN TO A-LEGS UNBRIDLE F/ BLOCKS HOOK UP GAS BUSTER LINES TO FLOW LINES
7/8/2008	18:00 - 06:00	12.00	LOC	4	RDMO	NIPPLE UP BOPS & CHOKE LINES TO MANIFOLD REPAIR LEAKING VALVES ON MUD TANKS PICK UP TOP DRIVE RAILS
	06:00 - 18:00	12.00	LOC	4	MIRU	CALLED & NOTIFIED GAYDLAND RICH W/ BLM @ 1530 HRS OF BOP TEST PICK UP TOP DRIVE RAILS INSTALL ROTARY DRIVE PICK UP SWIVEL TROUBLESHOOT HYDRAULIC PUMP PROBLEMS FOR RIG TONGS
	18:00 - 06:00	12.00	LOC	4	MIRU	PICK UP TOP DRIVE & SERVICE LOOP ATT. TO TORQUE UP CONNECTION LOST POWER TO TOP DRIVE TROUBLE SHOOT W/

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## Operations Summary Report

Legal Well Name: GH 7D-19-8-21  
 Common Well Name: GH 7D-19-8-21  
 Event Name: DRILLING  
 Contractor Name: Unit Drilling Co.  
 Rig Name: UNIT

Start: 6/10/2008 Spud Date: 6/10/2008  
 Rig Release: End:  
 Rig Number: 328 Group:

Date	From - To	Hours	Code	Sub Code	Phase	Description of Operations
7/8/2008	18:00 - 06:00	12.00	LOC	4	MIRU	TESCO TECH. FOUND ( T- SENSOR CABLE DAMAGED REPLACE W/ NEW T-CABLE ) TORQUE UP BOP CONNECTION & FUNCTION TEST BOPS
7/9/2008	06:00 - 17:00	11.00	BOP	2	DRLIN1	HELD SAFETY MEETING W/ B&C TESTER R/U TESTERS TEST CASING OK ATT. TO PRESURE TEST LOWER PIPE RAMS ( LEAKING ) CHANGE OUT RUBBER INSERTS
	17:00 - 23:00	6.00	BOP	1	DRLIN1	P/T LOWER RAMS AFTER HOLDING 10 MIN OBSERVE LEAK F/ RING GASKET @ WELL HEAD
	23:00 - 04:30	5.50	BOP	2	DRLIN1	N/D BOPS & LIFT BOPS CHANGE OUT RING GASKET & TIGHTEN STACK HOOK UP OF FLOW LINE
	04:30 - 06:00	1.50	TRP	2	DRLIN1	FUNCTION TEST & P/TEST BOPS LOW TEST 250 PSI & HIGH TEST 5000 PSI
7/10/2008	06:00 - 06:30	0.50	BOP	1	DRLIN1	INSTALL WEAR BUSHING & STRAP BHA
	06:30 - 12:30	6.00	TRP	1	DRLIN1	INSTALL BEARING FOR ROTATING HEAD
	12:30 - 16:00	3.50	DRL	4	DRLIN1	PICKING UP 12 1/4 ASSEMBLY
	16:00 - 16:30	0.50	EQT	2	DRLIN1	DRILL OUT SHOE TRACK EQUIPMENT & DRILL F/ 536' TO 551'
	16:30 - 18:00	1.50	DRL	1	DRLIN1	PERFORM FIT TEST EQU. TO 10.6 PPG
	18:00 - 19:30	1.50	CIRC	1	DRLIN1	DRILL F/ 551' TO 580' ( PLUG OFF FLOWLINE W/ METAL CUTTINGS )
	19:30 - 20:30	1.00	TRP	2	DRLIN1	CLEAN OUT FLOWLINE & PUMP 2 HIGH VIS SWEEPS
	20:30 - 22:00	1.50	TRP	2	DRLIN1	POH TO CHANGE OUT HOLE OPENER
	22:00 - 23:00	1.00	DRL	1	DRLIN1	CHANGE OUT HOLE OPENER & TRIP IN HOLE
	23:00 - 00:30	1.50	CIRC	1	DRLIN1	DRILL F/ 580' TO 610' ( 30' @ 30' P/HR ) WOB 10 TO 15 MUD WT 8.5 VIS 26
	00:30 - 06:00	5.50	DRL	1	DRLIN1	PACKED OFF FLOW LINE TAKE APART & CLEAN OUT
7/11/2008	06:00 - 09:30	3.50	DRL	1	DRLIN1	DRILL F/ 610' TO 835' ( 225' @ 41' P/HR ) WOB 12 TO 14 MUD WT 8.5 VIS 29
	09:30 - 10:30	1.00	RIG	1	DRLIN1	DRILL F/ 832' TO 1050' ( 218' @ 63' P/HR ) WOB 12/15 MUD WT 8.5 PPG VIS 28
	10:30 - 16:00	5.50	DRL	1	DRLIN1	RIG SERVICE
	16:00 - 18:30	2.50	CIRC	1	DRLIN1	DRILL F/ 1050' TO 1253' ( 203' @ 39' P/HR ) WOB 15/18 MUD WT 8.5 VIS 27
	18:30 - 06:00	11.50	DRL	1	DRLIN1	SHUT IN WELL OBSERVE CASING PRESSURE @ 285 PSI RAISE MUD WT TO 9.0 PPG
7/12/2008	06:00 - 14:00	8.00	DRL	1	DRLIN1	DRILL F/ 1253' TO 1,700' ( 447' @ 39' P/HR ) WOB 12/15 MUD WT 9.1PPG VIS 36
	14:00 - 16:30	2.50	CIRC	1	DRLIN1	DRILL F/ 1700' TO 1928' ( 228' @ 28.5' P/HR ) WOB 15/20 MUD WT 9.3 VIS 35
	16:30 - 17:00	0.50	TRP	2	DRLIN1	CIR. & CLEAN HOLE PUMP ECD PILL
	17:00 - 21:00	4.00	CIRC	1	DRLIN1	TRIP OUT HOLE TO 1125' OBSERVE WELL FLOWING SHUT IN WELL 185 PSI SHUT IN CASING PRESSURE
	21:00 - 22:00	1.00	TRP	2	DRLIN1	BUILD ECD PILL & SPOT SAME FLOW CHECK WELL STATIC PUMP SLUG
	22:00 - 23:00	1.00	TRP	1	DRLIN1	TRIP OUT OF HOLE DUE TO SLOW ROP
	23:00 - 01:00	2.00	TRP	2	DRLIN1	LAY DOWN MUD MOTOR & HOLE OPENER, P/U 9 5/8" MUD MOTOR & MAKE UP BIT
	01:00 - 02:00	1.00	CIRC	1	DRLIN1	TRIP IN HOLE TO 1894'
	02:00 - 03:00	1.00	DRL	1	DRLIN1	CIRCULATE OUT ECD PILL
	03:00 - 06:00	3.00	DRL	1	DRLIN1	OPEN UP HOLE F/1894' TO 1928'
7/13/2008	06:00 - 17:30	11.50	DRL	1	DRLIN1	DRILL F/ 1928' TO 2050' ( 122' @ 40.6' P/HR ) WOB 10/15 MUD WT 9.4 VIS 37
						DRILL F/ 2050' TO 2479' ( 429' @ 39' P/HR ) WOB 12/15 MUD WT 9.5 VIS 36 W/ NO LOSSES

## Operations Summary Report

Legal Well Name: GH 7D-19-8-21  
 Common Well Name: GH 7D-19-8-21  
 Event Name: DRILLING  
 Contractor Name: Unit Drilling Co.  
 Rig Name: UNIT

Spud Date: 6/10/2008  
 Start: 6/10/2008  
 Rig Release:  
 Rig Number: 328  
 End:  
 Group:

Date	From - To	Hours	Code	Sub Code	Phase	Description of Operations
7/13/2008	17:00 - 18:00	1.00	RIG	1	DRLIN1	RIG SERVICE
	18:00 - 22:00	4.00	DRL	1	DRLIN1	DRILL F/ 2479' TO 2566' ( 87' @ 23.8' P/HR ) WOB 18 MUD WT 9.5 VIS 34
	22:00 - 23:00	1.00	CIRC	1	DRLIN1	CIR BOTTOM UP & WIRE LINE SURVEY
	23:30 - 03:30	4.00	DRL	1	DRLIN1	DRILL F/ 2566' TO 2631' ( 65' @ 17.8' P/HR ) WOB 18/25 MUD WT 9.5 VIS 36
	03:30 - 04:00	0.50	CIRC	1	DRLIN1	CIR. BOTTOM UP
	04:00 - 04:30	0.50	TRP	2	DRLIN1	TRIP OUT OF HOLE TO 1705'
	04:30 - 05:30	1.00	CIRC	1	DRLIN1	FLOW CHECK OK & PUMP ECD PILL
	05:30 - 06:00	0.50	TRP	2	DRLIN1	TRIP OUT OF HOLE
	06:00 - 07:00	1.00	TRP	2	DRLIN1	TRIP OUT OF HOLE & CHANGE OUT BIT
	07:00 - 08:00	1.00	TRP	2	DRLIN1	TRIP IN HOLE TO CASING SHOE
7/14/2008	08:00 - 09:30	1.50	RIG	6	DRLIN1	CUT & SLIP DRILLING LINE
	09:30 - 11:00	1.50	TRP	2	DRLIN1	TRIP IN HOLE TO 2631'
	11:00 - 12:00	1.00	CIRC	1	DRLIN1	CIR OUT ECD PILL
	12:00 - 06:00	18.00	DRL	1	DRLIN1	DRILL F/ 2631' TO 3075' ( 444' @ 25.5' P/HR ) WOB 8/15 MUD WT 9.4 VIS 34
	06:00 - 08:30	2.50	CIRC	1	DRLIN1	CIRCULATE BOTTOMS UP BUILD AND SPOT ECD SLUG
	08:30 - 11:00	2.50	TRP	12	DRLIN1	TRIP OUT FOR MOTOR FAILURE, MOTOR LOCKED UP TOOK 3 HITS WITH TABLE TO FREE UP BUT STILL TIGHT
7/15/2008	11:00 - 12:00	1.00	TRP	1	DRLIN1	LAY DOWN MOTOR (HUNTING .16) AND BIT AND PICK UP NEW BIT AND MOTOR (HUNTING .1)
	12:00 - 13:30	1.50	TRP	12	DRLIN1	TRIP IN HOLE FILL @ BHA AND @ 2944
	13:30 - 14:00	0.50	REAM	1	DRLIN1	WASH FROM 2944 TO 3075--10' FILL HAD A LOT OF OIL PARIFIN COMING OVER SHAKERS
	14:00 - 06:00	16.00	DRL	1	DRLIN1	DRILL FROM 3,075 TO 3,550 (ROP 29.7) WOB 11-14, DHRPM 136, MW 9.4, VIS 40, BG GAS 1200 NO FLARE--NO LOSSES
	06:00 - 19:00	13.00	DRL	1	DRLIN1	DRILL FROM 3,550 TO 3,853 (ROP 22.4' HR) WOB 12-16, DHRPM 145-160, MW 9.5 PPG, VIS 42, BG GAS 1,000 UNITS HAD WATER FLOW @ 3760 CUT MW BACK .5 AND HAD A 3/8" FLOW ON CONNECTION BROUGHT WT UP TO 9.6 AND KILLED-HAD NO FLOW ON CONNECTIONS
	19:00 - 20:30	1.50	RIG	2	DRLIN1	REPAIR AIR COMPRESSOR, ONE WON'T COME ON AND THE OTHER HAD SOME BURNT WIRES
7/16/2008	20:30 - 23:00	2.50	DRL	1	DRLIN1	DRILL FROM 3,853 TO 3,880 (ROP 10.8' HR) AFTER WORKING ON COMPRESSORS WENT BACK TO BOTTOM AND HAD A LOT OF SLIP STICK TRIED WORKING ALL DIFFERNT PERAMETERS TO GET TO DRILL-NO LUCK
	23:00 - 23:30	0.50	SUR	1	DRLIN1	DROP SURVEY AND CHECK FOR FLOW-NO FLOW, PUMP TRIP SLUG
	23:30 - 02:30	3.00	TRP	10	DRLIN1	TRIP OUT HOLE TO CHANGE BIT
	02:30 - 04:00	1.50	TRP	1	DRLIN1	LAY DOWN 9 5/8 MOTOR & BIT, PICK UP 6 3/4 MOTOR AND HOLE OPENER
	04:00 - 06:00	2.00	TRP	10	DRLIN1	TRIP IN HOLE FILL @ BHA
	06:00 - 06:30	0.50	REAM	1	DRLIN1	WASH TO BOTTOM FROM 3,698 TO BOTTOM NO HOLE FILL
	06:30 - 10:00	3.50	DRL	1	DRLIN1	DRILL FROM 3,880 TO 3,935 WITH HOLE OPENER, PRESSURED UP AND WOULDN'T COME BACK DOWN
	10:00 - 10:30	0.50	OTH		DRLIN1	BUILD TRIP SLUG AND PUMP
	10:30 - 13:00	2.50	TRP	13	DRLIN1	TRIP OUT OF HOLE-FISH IN HOLE LEFT-BIT AND 7.52' OF MOTOR IN HOLE (OD 6 15/16'S),
	13:00 - 14:00	1.00	RIG	1	DRLIN1	SEVICE RIG, TOP DRIVE, DRAW-TOOL, SWIVEL, CROWN
7/17/2008	14:00 - 15:00	1.00	WOT	4	DRLIN1	WAIT ON FISHING TOOLS FROM SLAUGH FISHING,
	15:00 - 16:30	1.50	FISH	5	DRLIN1	MAKE UP FISHING TOOLS

## Operations Summary Report

Legal Well Name: GH 7D-19-8-21  
 Common Well Name: GH 7D-19-8-21  
 Event Name: DRILLING  
 Contractor Name: Unit Drilling Co.  
 Rig Name: UNIT

Start: 6/10/2008  
 Rig Release:  
 Rig Number: 328

Spud Date: 6/10/2008  
 End:  
 Group:

Date	From - To	Hours	Code	Sub Code	Phase	Description of Operations
7/17/2008	16:30 - 19:00	2.50	FISH	5	DRLIN1	TRIP IN WITH FISHING ASSEMBLY,
	19:00 - 19:30	0.50	CIRC	1	DRLIN1	CIRCULATE GAS OUT OF HOLE TO LATCH ON TO FISH
	19:30 - 20:30	1.00	FISH	5	DRLIN1	WORK ON TOP OF FISH SET DOWN ON FISH PICKED UP HAD MORE DRAG THEN BEFORE LATCHING ONTO FISH, PICKED UP 5' LOST DRAG, WENT DOWN AND SET DOWN ONTO FISH 20K, 30K X 2, PICKED UP AND HAD DRAG
	20:30 - 23:30	3.00	FISH	5	DRLIN1	PUMP TRIP SLUG AND TRIP OUT USING PIPE SPINNERS,
7/18/2008	23:30 - 02:00	2.50	TRP	4	DRLIN1	FULL RECOVERY OF MOTOR AND BIT,BREAK OUT AND LAY DOWN FISH, ALL FISHING TOOLS. RECOVERED ALL 8 BALL BEARINGS FROM MOTOR.
	02:00 - 03:00	1.00	OTH		DRLIN1	CLEAN UP RIG FLOOR
	03:00 - 04:00	1.00	TRP	1	DRLIN1	PICK UP BIT #6 AND MUD MOTOR. TEST MOTOR AND LAY DOWN 2 JOINTS OF HWD.
	04:00 - 06:00	2.00	TRP	12	DRLIN1	TIH. INSTALL ROTATING HEAD RUBBER.
7/19/2008	06:00 - 07:00	1.00	TRP	10	DRLIN1	TRIP IN HOLE WITH BIT #6,FILL PIPE @ BHA, 3219 HOLE CLEAN,
	07:00 - 07:30	0.50	REAM	1	DRLIN1	WASH FROM 3,741 TO 3,907--TOP OF 8 3/4 HOLE
	07:30 - 09:00	1.50	REAM	1	DRLIN1	REAM 29' OF 8 3/4 PILOT WOB 2-4 PUMP PSI 2390
	09:00 - 12:30	3.50	DRL	1	DRLIN1	DRILL FROM 3,935 TO 4,027 (ROP 26.2' HR) WOB 10-12, DHRPM 145, MW 9.6, VIS 33, BGAS 450, NO FLARES OR FLUID LOSS
7/19/2008	12:30 - 13:30	1.00	RIG	1	DRLIN1	SERVICE RIG, TOP DRIVE, DRAW-WORKS, SWIVEL, FIX O-RING ON DIS CHARGE OF MUD PUMP
	13:30 - 18:00	4.50	DRL	1	DRLIN1	DRILL 4,027 TO 4,123 (ROP 21.3' HR) WORK THE SAME PERAMETERS
	18:00 - 22:30	4.50	DRL	1	DRLIN1	DRILL 4,123 TO 4,234 (ROP 24.6' HR) WORKING THE SAME PERAMETERS
	22:30 - 23:00	0.50	RIG	2	DRLIN1	FIX LINER WASHER HOSE ON #2 PUMP
7/19/2008	23:00 - 06:00	7.00	DRL	1	DRLIN1	DRILL FROM 4,234 TO 4,384 (ROP 21.4' HR)
	06:00 - 11:30	5.50	DRL	1	DRLIN1	DRILL FROM 4,348 TO 4,504 (ROP 28.3' HR) WOB 10-12, DHRPM 150, MW 9.6, VIS 38, BG GAS 420, NO FLARE,
	11:30 - 12:30	1.00	RIG	1	DRLIN1	RIG SERVICE, TOP DRIVE, TABLE, BLOCKS, SWIVEL, CROWN
	12:30 - 17:00	4.50	DRL	1	DRLIN1	DRILL FROM 4,504 TO 4,635 (ROP 29.1 ) WORK SAME PERAMETERS, HOLE TOOK A DRINK OF 30 BBL.S @ 4542' HAD SOME CHATTER AFTER A CONNECTION WHEN SETTING IT ON BOTTOM BUT LEVELED OUT WHEN WE PUT 9K ON AND ROT 85
7/20/2008	17:00 - 18:00	1.00	RIG	2	DRLIN1	REPAIR -MUD PUMP DISCHARGE SCREEN END OF PUMP
	18:00 - 00:30	6.50	DRL	1	DRLIN1	DRILL FROM 4,635 TO 4,791 (ROP 26' HR) WORK THE SAME PERAMETERS
	00:30 - 01:30	1.00	SUR	1	DRLIN1	WIRE LINE SURVEY @ 4718 1.1 DEG, 203.6 AZ
	01:30 - 06:00	4.50	DRL	1	DRLIN1	DRILL FROM 4,791 TO 4,911 (ROP 26.6' HR) HOLE STARTED SEEPING @ 5 BBL.S HR @ 4835, PUMP 10-12% 25 BBL. LCM SWEEPS
7/21/2008	06:00 - 14:00	8.00	DRL	1	DRLIN1	DRILL FROM 4,911 TO 5,077 (ROP 20.7' HR) WOB 12-16, DHRPM 155, MW 9.6, VIS 37, BGAS 225, HOLE SEEPING 5 BBL.S HR HIT SLOW DRILLING SPOT @ 5,050-5,065
	14:00 - 15:00	1.00	RIG	1	DRLIN1	RIG SERVICE
	15:00 - 17:00	2.00	RIG	2	DRLIN1	WORK ON DIS CHARGE SCREEN MODULE--WASHED OUT-CHANGE OUT
	17:00 - 06:00	13.00	DRL	1	DRLIN1	DRILL FROM 5,077 TO 5,390 (ROP 24.0' HR) WOB 12-18, DHRPM 145-165, MW 9.6, VIS 37, BGAS 475, HOLE SEEPING 7 BBL.S HR
7/21/2008	06:00 - 09:00	3.00	DRL	1	DRLIN1	DRILL FROM 5,390 TO 5,468 (CONTACTED BLM (VOICE MAIL) GLAYED RICHERDS-CASING RUN AND BOPE TESTING.LEFT MESSAGE CONTACT # 1-435-828-7632



## Operations Summary Report

Legal Well Name: GH 7D-19-8-21  
 Common Well Name: GH 7D-19-8-21  
 Event Name: DRILLING  
 Contractor Name: Unit Drilling Co.  
 Rig Name: UNIT

Start: 6/10/2008  
 Rig Release:  
 Rig Number: 328

Spud Date: 6/10/2008  
 End:  
 Group:

Date	From - To	Hours	Code	Sub Code	Phase	Description of Operations
7/21/2008	09:00 - 10:00	1.00	CIRC	1	DRLIN1	CIRCULATE BOTTOMS UP FOR SAMPLE PUMP HI VIS
	10:00 - 11:30	1.50	TRP	14	DRLIN1	SWEEP-HOLE IS CLEAN-FIRM SHALE-GEO DOUG
	11:30 - 12:30	1.00	CIRC	1	DRLIN1	SHORT TRIP 20 STANDS-HOLE CLEAN
	12:30 - 13:00	0.50	SUR	1	DRLIN1	CIRCULATE TO RUN CASING, SHAKERS CLEAN
	13:00 - 16:30	3.50	TRP	2	DRLIN1	DROP SURVEY, FLOW CHECK, (NO FLOW)
						TRIP OUT OF HOLE STRAP OUT SLM (5466.54) NO CHANGE AND
						LAY DOWN 8" DC, MONEL AND MOTOR
	16:30 - 17:30	1.00	OTH		DRLIN1	PULL WEAR BUSHING
	17:30 - 19:00	1.50	CSG	1	DRLIN1	HOLD SAFETY MEETING & RIG UP CASING CREW
	19:00 - 00:00	5.00	CSG	2	DRLIN1	RUN 128 JOINTS OF 9 5/8", 46.1#, P-110, CASING AS FOLLOWS:
7/22/2008						SHOE AT 5451', FLOAT COLLAR AT 5367'. RAN 25 CENTRALIZERS
						EVERY 120' +/-, 2 ON SHOE TRACT.
	00:00 - 01:00	1.00	CSG	1	DRLIN1	RIG DOWN CASERS WHILE CIRCULATING
	01:00 - 02:00	1.00	CIRC	1	DRLIN1	CIRCULATE HOLE
	02:00 - 05:30	3.50	OTH		DRLIN1	PACK OFF WELL HEAD TO CEMENT THRU "A" SECTION
	05:30 - 06:00	0.50	CIRC	1	DRLIN1	CIRCULATE HOLE VOLUME 2 1/2 TIME TO CEMENT
	06:00 - 07:30	1.50	CIRC	1	CSGSUR	CIRCULATE HOLE TO CEMENT 9 5/8 CASING- LOSSING 15-20
						BBL.S HR.
	07:30 - 12:30	5.00	CMT	2	CSGSUR	HOLD SAFETY MEETING-CEMENT 9 5/8" FIRST INTERMEDIATE
						CASING AS FOLLOWS: PRESSURE TEST LINES TO 8,000 PSI,
7/23/2008						PUMP SPACER 10BBL. WATER, 50 BBL.S OF SUPER FLUSH, 30
						BBL.S OF SCAVENGER CEMENT 14.3 PPG, PUMP 170 BBL.S 1st
						LEAD CEMENT 14.3 PPG, PUMP 210 BBL.S 2nd LEAD CEMENT 14.3
						PPG, PUMP 60 BBL. TAIL CEMENT 14.3 PPG, DISPLACE WITH 394
						BBL. OF 9.7 PPG MUD, PLUG BUMP AND FLOATS HELD PUMPED
						55 BBL.S OF TOP OUT
	12:30 - 13:30	1.00	CMT	1	CSGSUR	RIG DOWN CEMENTERS
	13:30 - 14:00	0.50	OTH		DRLIN2	PULL CEMENT ISOLATION TOOL
	14:00 - 15:00	1.00	OTH		DRLIN2	CHANGE OUT BAILS AND MOUSE HOLE TO PRESSURE TEST
	15:00 - 19:30	4.50	BOP	2	DRLIN2	RIG UP TESTERS AND TEST BOPE 10,000 PSI TEST
7/23/2008	19:30 - 20:30	1.00	OTH		DRLIN2	INSTALL WEAR BUSHING
	20:30 - 23:30	3.00	TRP	2	DRLIN2	PICK MONEL, MOTOR & MAKE UP BIT --TRIP IN HOLE FILL @ BHA
						TAGGED @ 5,366
	23:30 - 00:30	1.00	DRL	4	DRLIN2	DRILL OUT PLUG, FLOAT COLLAR 5,367, FLOAT SHOE 5,451
	00:30 - 01:30	1.00	DRL	1	DRLIN2	DRILL FROM 5,468 TO 5,484--BREAK IN BIT AND FIND
						PERAMETERS TO DRILL
	01:30 - 02:30	1.00	OTH		DRLIN2	CIRCULATE AND PERFORM FIT TEST 9.5 MW + 1010 PSI =EMW
						13.1PPG
	02:30 - 06:00	3.50	DRL	1	DRLIN2	DRILL FROM 5,484 TO 5572 (ROP 25.1' HR) WOB 23, DHRPM 105,
						MW 9.4, VIS 38
7/23/2008	06:00 - 11:30	5.50	DRL	1	DRLIN2	DRILL FROM 5,572 TO 5,676 (ROP 18.9' HR) WOB 20-25, DHRPM
						125, MW 9.2, VIS 37, NO GAS
	11:30 - 12:00	0.50	RIG	1	DRLIN2	SERVICE RIG BLOCK TOP DRIVE
	12:00 - 17:00	5.00	DRL	1	DRLIN2	DRILL FROM 5,676 TO 5,775 (ROP 19.8' HR) WOB 22-28, DHRPM
						120-130, MW 9.2, VIS 37
	17:00 - 18:00	1.00	OTH		DRLIN2	WORK TIGHT CONNECTION PULL 40-50K OVER-BRING MW TO
7/23/2008						9.3+
	18:00 - 02:30	8.50	DRL	1	DRLIN2	DRILL FROM 5,775 TO 5,914 (ROP 16.3' HR) PRESSURED UP AND
						TORQUE, ROP WAS ALSO SLOWING BEFORE SPIKE, HOLE TOOK
						A 42 BBL. DRINK @ 5,907 WOB, 20-30, DHRPM 120-140, MW 9.4,
7/23/2008						VIS 35, NO GAS
	02:30 - 03:00	0.50	SUR	1	DRLIN2	CIRCULATE AND DROP SURVEY
7/23/2008	03:00 - 06:00	3.00	TRP	10	DRLIN2	TRIP OUT OF HOLE TO CHANGE BIT

## Operations Summary Report

Legal Well Name: GH 7D-19-8-21  
 Common Well Name: GH 7D-19-8-21  
 Event Name: DRILLING  
 Contractor Name: Unit Drilling Co.  
 Rig Name: UNIT

Start: 6/10/2008  
 Rig Release:  
 Rig Number: 328  
 Spud Date: 6/10/2008  
 End:  
 Group:

Date	From - To	Hours	Code	Sub Code	Phase	Description of Operations
7/24/2008	06:00 - 07:00	1.00	TRP	1	DRLIN2	BREAK OUT BIT , L/D MOTOR AND PICK UP MOTOR AND NEW BIT
	07:00 - 10:00	3.00	TRP	10	DRLIN2	TRIP IN HOLE WITH NEW BIT #8 AND .24 MUD MOTOR FILL @ BHA AND CASING SHOE
	10:00 - 10:30	0.50	REAM	1	DRLIN2	WASH FROM 5773 TO 5869 -NO FILL
	10:30 - 16:00	5.50	DRL	1	DRLIN2	DRILL FROM 5,914 TO 6,060 (ROP 26.5' HR) WOB 4-6, DHRPM 183, MW 9.4, VIS 38, NO BGAS
	16:00 - 16:30	0.50	RIG	1	DRLIN2	SERVICE RIG TOP DRIVE, BLOCKS, SWIVEL
	16:30 - 17:00	0.50	DRL	1	DRLIN2	DRILL FROM 6,060 TO 6,083 (ROP 46' HR) WOB 4-6, DHRPM 183, MW 9.4, VIS 40
	17:00 - 19:30	2.50	RIG	2	DRLIN2	PULL TO SHOE AND REPAIR SWIVEL PACKING
	19:30 - 06:00	10.50	DRL	1	DRLIN2	DRILL FROM 6,083 TO 6,295 (ROP 20.1' HR) WOB 4-8, DHRPM 170-185, MW 9.4, VIS 37
7/25/2008	06:00 - 08:30	2.50	DRL	1	DRLIN2	DRILL FROM 6,295 TO 6,346 (ROP 20.4' HR)WOB 6-9, DHRPM 192, MW 9.4, VIS 41, BG GAS 24 CONN 224
	08:30 - 09:00	0.50	RIG	1	DRLIN2	SERVICE RIG TOP DRIVE, BLOCKS, SWIVEL
	09:00 - 18:00	9.00	DRL	1	DRLIN2	DRILL FROM 6,346 TO 6,575 (ROP 25.4' HR) WOB 6-10, DHRPM 185-205, MW 9.4, VIS 41, BG GAS 45 CON GAS
	18:00 - 06:00	12.00	DRL	1	DRLIN2	DRILL FROM 6,575 TO 6,855(ROP 23.3' HR) WOB 5-13, DHRPM 185-210, MW 9.4, VIS 40, BG GAS 24
7/26/2008	06:00 - 08:30	2.50	DRL	1	DRLIN2	DRILL FROM 6,855 TO 6,916 (ROP 24.4' HR) WOB 10-16, DHRPM 175-195, MW 9.4, VIS 37
	08:30 - 09:00	0.50	RIG	1	DRLIN2	SERVICE RIG, BLOCKS, TOP DRIVE, SWIVEL
	09:00 - 18:00	9.00	DRL	1	DRLIN2	DRILL FROM 6,916 TO 7,125 (ROP 23.2' HR) WORK THE SAME PERAMETERS
	18:00 - 21:00	3.00	DRL	1	DRLIN2	DRILL FROM 7,125 TO 7,206 (ROP 27' HR) WORK THE SAME PERAMETERS
	21:00 - 22:00	1.00	SUR	1	DRLIN2	WIRE LINE SURVEY @ 7125 1.9 DEG, 166.4 AZ
	22:00 - 06:00	8.00	DRL	1	DRLIN2	DRILL FROM 7,206 TO 7,391 (ROP 23.1' HR)WOB 10-16, DHRPM 170-195, MW 9.4, VIS 38, BG GAS 15, CON GAS 50--NO LOSSES LAST 24 HR.S
7/27/2008	06:00 - 10:30	4.50	DRL	1	DRLIN2	DRILL FROM 7,391 TO 7,492 (ROP 22.4' HR) WOB 12-18, DHRPM 175-195, MW 9.4, VIS 38, BG GAS 15, CON GAS 66, NO LOSSES
	10:30 - 11:00	0.50	RIG	1	DRLIN2	SERVICE RIG- TOP DRIVE, BLOCKS, SWIVEL,
	11:00 - 18:00	7.00	DRL	1	DRLIN2	DRILL FROM 7,492 TO 7,655 (ROP 23.2' HR) WOB 12-20, DHRPM 170-195, MW 9.4, VIS 37, BG GAS 17, ERATIC DRILLING SLOW FOR A COUPLE FT THEN BACK UP TO 30+' HR
	18:00 - 05:00	11.00	DRL	1	DRLIN2	DRILL FROM 7,655 TO 7,911(ROP 23.3' HR)WOB 15-21, DHRPM 170-195, MW 9.4, VIS 38, BGGAS 23,
	05:00 - 05:30	0.50	SUR	1	DRLIN2	CHECK FLOW AND DROP SURVEY
7/28/2008	05:30 - 06:00	0.50	TRP	10	DRLIN2	TRIP OUT OF HOLE TO CHANGE BIT AND BHA INSPECTION
	06:00 - 08:00	2.00	TRP	10	DRLIN2	TRIP OUT OF HOLE
	08:00 - 09:00	1.00	TRP	1	DRLIN2	LAY DOWN AND PICK UP MOTOR AND BIT, CHANGE OUT THE JARS
	09:00 - 13:00	4.00	ISP	1	DRLIN2	INSPECT BHA GOING IN THE HOLE
	13:00 - 14:30	1.50	TRP	10	DRLIN2	TRIP IN HOLE TO SHOE
	14:30 - 15:30	1.00	RIG	6	DRLIN2	CUT AND SLIP DRILLING LINE
	15:30 - 16:30	1.00	TRP	10	DRLIN2	TRIP IN HOLE TO 7,775
	16:30 - 17:00	0.50	REAM	1	DRLIN2	WASH FROM 7,775 TO 7,911
7/29/2008	17:00 - 06:00	13.00	DRL	1	DRLIN2	DRILL FROM 7,911 TO 8,237 (ROP 25' HR) WOB 10-12, DHRPM 165, MW 9.4, VIS 38, BG GAS 15, CON GAS 165
	06:00 - 12:00	6.00	DRL	1	DRLIN2	DRILL FROM 8,237 TO 8,347 (ROP 18.3' HR) WOB 10-15, DHRPM 160-175, MW 9.4, VIS 35, DRILL QUICK FOR A COUPLE FT THEN

## Operations Summary Report

Legal Well Name: GH 7D-19-8-21  
 Common Well Name: GH 7D-19-8-21  
 Event Name: DRILLING  
 Contractor Name: Unit Drilling Co.  
 Rig Name: UNIT

Start: 6/10/2008  
 Rig Release:  
 Rig Number: 328  
 Spud Date: 6/10/2008  
 End:  
 Group:

Date	From - To	Hours	Code	Sub Code	Phase	Description of Operations
7/29/2008	06:00 - 12:00	6.00	DRL	1	DRLIN2	SLOW A COUPLE FT
	12:00 - 13:00	1.00	RIG	1	DRLIN2	SERVICE RIG AND TOP DRIVE, SWIVEL, BLOCKS
	13:00 - 18:00	5.00	DRL	1	DRLIN2	DRILL FROM 8,347 TO 8,474 (ROP 25.4' HR) WOB 15-18, DHRPM 160-180, MW 9.4, VIS 37 BG GAS 20
	18:00 - 20:00	2.00	DRL	1	DRLIN2	DRILL FROM 8,474 TO 8,514 (ROP 20' HR) WOB 15-18, DHRPM 170, MW 9.4, VIS 37, BG GAS 20
	20:00 - 20:30	0.50	OTH		DRLIN2	TROUBLE SHOOT PRESSURE LOSS (LOSS OF 475 PSI), SLOW PUMPED BOTH PUMPS, THET WERE GOOD CHECKED VALVES AND POP OFF LINES
	20:30 - 01:00	4.50	TRP	2	DRLIN2	TRIP OUT OF HOLE WET BECAUSE OF PRESSURE LOSS
	01:00 - 02:00	1.00	TRP	1	DRLIN2	LAY DOWN AND PICK UP MUD MOTOR AND BIT
	02:00 - 02:30	0.50	OTH		DRLIN2	CHANGE OUT SAVER SUB ON TOP DRIVE
	02:30 - 06:00	3.50	RIG	2	DRLIN2	TROUBLE SHOOT ANTI-FREEZE LEAK ON BRAKE DRUM--HOSE THAT RUNS THRU BRAKE DRUM
7/30/2008	06:00 - 08:30	2.50	RIG	2	DRLIN2	REPAIR DRAWWORKS COOLING LINE FOR BRAKES ( LEAKING )
	08:30 - 14:00	5.50	TRP	2	DRLIN2	CHANGE OUT BIT, MUD MOTOR & JARS TIH ( FILL PIPE EVERY 30 STDS )
	14:00 - 14:30	0.50	REAM	1	DRLIN2	SAFETY WASH & REAM F/ 8329' TO BOTTOM @ 8514' W/ NO FILL HOLE IN GOOD SHAPE
	14:30 - 15:00	0.50	DRL	1	DRLIN2	DRILL F/ 8514' TO 8538' ( 24' @ 24' P/HR ) WOB 12/15 DHRPM 195 MUD WT 9.4 VIS 38 W/ NO LOSSES
	15:00 - 15:30	0.50	RIG	1	DRLIN2	RIG SERVICE
	15:30 - 18:00	2.50	DRL	1	DRLIN2	DRILL F/ 8538' TO 8590' ( 52' @ 21' P/HR ) WOB 14/17 DHRPM 195 MUD WT 9.4 VIS 39 W/ NO LOSSES
	18:00 - 22:00	4.00	DRL	1	DRLIN2	DRILL F/ 8590' TO 8707' ( 117' @ 30' P/HR ) WOB 14/18 DHRPM 195 MUD WT 9.4 VIS 40 W/ NO LOSSES
	22:00 - 01:00	3.00	RIG	2	DRLIN2	REPLACE BLOWER MOTOR ON # 2 MUD PUMP
	01:00 - 04:00	3.00	DRL	1	DRLIN2	DRILL F/ 8707' TO 8761' ( 54' @ 18' P/HR ) WOB 15/20 DHRPM 195 MUD WT 9.4 VIS 38 W/ NO LOSSES OBSERVE PRESSURE INCREASE PICK UP OFF BOTTOM SAME PRESSURE READINGS MUD MOTOR LOCKED UP
7/31/2008	04:00 - 05:00	1.00	CIRC	1	DRLIN2	CIR. BOTTOMS UP FLOW CHECK OK PUMP SLUG
	05:00 - 06:00	1.00	TRP	2	DRLIN2	TRIP OUT OF HOLE DUE TO MUD MOTOR FAILURE
	06:00 - 08:30	2.50	TRP	2	DRLIN2	TOOH
	08:30 - 09:30	1.00	TRP	1	DRLIN2	L/D MUD MOTOR C/O BIT & MUD MOTOR
	09:30 - 14:00	4.50	TRP	2	DRLIN2	TRIP IN HOLE FILL EVERY 30 STDS
	14:00 - 14:30	0.50	REAM	1	DRLIN2	WASH & REAM F/ 8665' TO BOTTOM @ 8761' W/ NO FILL OR HOLE PROBLEMS
	14:30 - 16:30	2.00	DRL	1	DRLIN2	DRILL F/ 8761' TO 8824' ( 63' @ 32' P/HR ) WOB 14/16 DHRPM 160 MUD WT 9.4 VIS 38 W/ NO LOSSES
	16:30 - 17:00	0.50	RIG	1	DRLIN2	RIG SERVICE
	17:00 - 18:00	1.00	DRL	1	DRLIN2	DRILL F/ 8824' TO 8856' ( 32' @ 32' P/HR ) WOB 14/16 DHRPM 160 MUD WT 9.4 VIS 39 W/ NO LOSSES
	18:00 - 06:00	12.00	DRL	1	DRLIN2	DRILL F/ 8856' TO 9236' ( 380' @ 32' P/HR ) WOB 14/16 DHRPM 160 MUD WT 9.5 VIS 41 W/ NO LOSSES
8/1/2008	06:00 - 12:00	6.00	DRL	1	DRLIN2	DRILL F/ 9236' TO 9397' ( 161' @ 26.8' P/HR ) WOB 14/18 DHRPM 160 MUD WT 9.7 VIS 38 W/ NO LOSSES
	12:00 - 12:30	0.50	RIG	1	DRLIN2	SERVICE RIG
	12:30 - 18:00	5.50	DRL	1	DRLIN2	DRILL F/ 9397' TO 9565' ( 168' @ 31' P/HR ) WOB 14/18 DHRPM 160 MUD WT 9.7 VIS 39 W/ NO LOSSES
	18:00 - 06:00	12.00	DRL	2	DRLIN2	DRILL F/ 9565' TO 9905' ( 340' @ 29' P/HR ) WOB 14/18 DHRPM 160 MUD WT 9.8 VIS 40 W/ NO LOSSES
8/2/2008	06:00 - 08:00	2.00	DRL	1	DRLIN2	DRILL F/ 9905' TO 9971' ( 66' @ 33' P/HR ) WOB 14/18 DHRPM 160

## Operations Summary Report

Legal Well Name: GH 7D-19-8-21  
 Common Well Name: GH 7D-19-8-21  
 Event Name: DRILLING  
 Contractor Name: Unit Drilling Co.  
 Rig Name: UNIT

Start: 6/10/2008 Spud Date: 6/10/2008  
 Rig Release: End:  
 Rig Number: 328 Group:

Date	From - To	Hours	Code	Sub Code	Phase	Description of Operations
8/2/2008	06:00 - 08:00	2.00	DRL	1	DRLIN2	MUD WT 10.6 VIS 38 W/ NO LOSSES
	08:00 - 08:30	0.50	RIG	1	DRLIN2	RIG SERVICE
	08:30 - 13:00	4.50	DRL	1	DRLIN2	DRILL F/ 9971' TO 10102' ( 131' @ 29' P/HR ) WOB 15/18 DHRPM 160 MUD WT 10.6 VIS 38 W/ NO LOSSES
	13:00 - 20:00	7.00	RIG	2	DRLIN2	LOST POWER SUPPLY TO DRILLER CONSOLE PANEL TROUBLE SHOOT POWER SUPPLY PROBLEM ( FOUND BLOWN PLC FUSE IN SCR CABINET )
	20:00 - 06:00	10.00	DRL	1	DRLIN2	DRILL F/ 10102' TO 10379' ( 277' @ 28' P/HR ) WOB 14/18 DHRPM 160 MUD WT 10.6 VIS 41 W/ NO LOSSES
8/3/2008	06:00 - 11:30	5.50	DRL	1	DRLIN2	DRILL F/ 10379' TO 10545' ( 166' @ 30' P/HR ) WOB 15/18 DHRPM 160 MUD WT 10.8 VIS 38 W/ NO LOSSES
	11:30 - 12:30	1.00	RIG	1	DRLIN2	RIG SERVICE
	12:30 - 13:30	1.00	RIG	2	DRLIN2	TOP DRIVE TROUBLE SHOOT DC GROUND FAULT ( FOUND BAD LEAD IN SERVICE LOOP NEAR POWER MODULE SLIGHT HOLE ON INSULATION
	13:30 - 06:00	16.50	DRL	1	DRLIN2	DRILL F/ 10545' TO 10932' ( 387' @ 24' P/HR ) WOB 15/20 DHRPM 160 MUD WT 11 VIS 41 W/ NO LOSSES
8/4/2008	06:00 - 08:00	2.00	DRL	1	DRLIN2	DRILL F/ 10932' TO 10962' ( 30' @ 15' P/HR ) WOB 22/25 DHRPM 160 MUD WT 11 VIS 38 W/ NO LOSSES
	08:00 - 10:00	2.00	CIRC	1	DRLIN2	CIR. BOTTOMS UP & FLOW CHECK OK DROP SURVEY PUMP ECD PILL
	10:00 - 15:30	5.50	TRP	2	DRLIN2	TRIP OUT OF HOLE W/ NO HOLE PROBLEMS
	15:30 - 16:00	0.50	TRP	1	DRLIN2	CHANGE OUT BIT & MUD MOTOR
	16:00 - 19:00	3.00	TRP	2	DRLIN2	TRIP IN HOLE FILL PIPE EVERY 30 STDS
	19:00 - 20:00	1.00	REAM	1	DRLIN2	WASH & REAM THROUGH TIGHT HOLE @ 5728 TO 5758
	20:00 - 22:00	2.00	TRP	2	DRLIN2	CONT. TO TRIP IN HOLE TO 10772 W/ NO HOLE PROBLEMS
	22:00 - 22:30	0.50	REAM	1	DRLIN2	WASH & REAM F/ 10772 TO 10932 W/ NO FILL
	22:30 - 06:00	7.50	DRL	1	DRLIN2	DRILL F/ 10962' TO 11123' ( 161' @ 22' P/HR ) WOB 14/20 DHRPM 150 MUD WT 11 VIS 41
	06:00 - 13:00	7.00	DRL	1	DRLIN2	DRILL F/ 11123' TO 11310' ( 187' @ 27' P/HR ) WOB 18/22 DHRPM 155 MUD WT 11.2 VIS 41 W/ NO LOSSES
8/5/2008	13:00 - 13:30	0.50	RIG	1	DRLIN2	RIG SERVICE
	13:30 - 18:00	4.50	DRL	1	DRLIN2	DRILL F/ 11310' TO 11420' ( 110' @ 26' P/HR ) WOB 18/22 DHRPM 155 MUD WT 11.2 VIS 40 W/ NO LOSSES
	18:00 - 06:00	12.00			DRLIN2	DRILL F/ 11420 TO 11654 ( 234' @ 20' P/HR ) WOB 18/24 DHRPM 155 MUD WT 11.2 VIS 41 W/ NO LOSSES
	06:00 - 08:00	2.00	DRL	1	DRLIN2	DRILL F/ 11654' TO 11693' ( 39' @ 20' P/HR ) WOB 25/28 DHRPM 155 MUD WT 11.3 VIS 38 W/ NO LOSSES
	08:00 - 08:30	0.50	RIG	1	DRLIN2	RIG SERVICE
8/6/2008	08:30 - 12:00	3.50	DRL	1	DRLIN2	DRILL F/ 11693' TO 11745' ( 52' @ 14' P/HR ) WOB 28 DHRPM 155 MUD WT 11.3 VIS 41 W/ NO LOSSES
	12:00 - 13:00	1.00	CIRC	1	DRLIN2	CIR. BOTTOMS UP & DROP SURVEY F/C OK
	13:00 - 14:00	1.00	TRP	2	DRLIN2	TOOH 10 STANDS
	14:00 - 14:30	0.50	CIRC	1	DRLIN2	PUMP ECD PILL
	14:30 - 18:30	4.00	TRP	2	DRLIN2	TRIP OUT OF HOLE
	18:30 - 19:00	0.50	TRP	1	DRLIN2	LAY DOWN MUD MOTOR & BIT
	19:00 - 01:00	6.00	TRP	2	DRLIN2	TRIP IN HOLE ( TAG RESISTANCE @ 10985 )
	01:00 - 05:00	4.00	REAM	1	DRLIN2	WASH & REAM F/ 10985 TO BOTTOM @ 11745 ( VERY HARD REAMING )
	05:00 - 06:00	1.00	DRL	1	DRLIN2	DRILL F/ 11745' TO 11770' ( 25' P/HR ) WOB 15/22 DHRPM 170 MUD WT 11.2 VIS 40 W/ NO LOSSES
	06:00 - 14:00	8.00	DRL	1	DRLIN2	DRILL F/ 11770' TO 11920' ( 150' @ 19' P/HR ) WOB 18/25 DHRPM 155 MUD WT 12.1 VIS 41

## Operations Summary Report

Legal Well Name: GH 7D-19-8-21  
 Common Well Name: GH 7D-19-8-21  
 Event Name: DRILLING  
 Contractor Name: Unit Drilling Co.  
 Rig Name: UNIT

Start: 6/10/2008  
 Rig Release:  
 Rig Number: 328

Spud Date: 6/10/2008  
 End:  
 Group:

Date	From - To	Hours	Code	Sub Code	Phase	Description of Operations
8/7/2008	14:00 - 19:00	5.00	CIRC	1	DRLIN2	CIR. & RAISE MUD WT TO 12.1 PPG
	19:00 - 06:00	11.00	DRL	1	DRLIN2	DRILL F/ 11920' TO 12090' ( 170' @ 15.6' P/HR ) WOB 20/25 DHRPM 155 MUD WT 12.1 VIS 40 W/ NO LOSSES
8/8/2008	06:00 - 12:30	6.50	CIRC	1	DRLIN2	DRILL F/ 12090' TO 12155' ( 65' @ 6.5' P/HR ) WOB 25 DHRPM 145 MUD WT 12.3 VIS 41 LOST RETURNS AFTER REACHING TD
	12:30 - 16:00	3.50	CIRC	1	DRLIN2	W/ NO RETURNS CIR. PUMP LCM PILLS
	16:00 - 18:30	2.50	CIRC	2	DRLIN2	REGAIN FLOW CIR. & CONDITION MUD & BUILD VOLUME IN PITS
	18:30 - 19:00	0.50	CIRC	2	DRLIN2	FLOW CHECK OK
	19:00 - 20:00	1.00	TRP	14	DRLIN2	SHORT TRIP
8/9/2008	20:00 - 00:00	4.00	CIRC	1	DRLIN2	CIR OUT GAS & CONDITION MUD
	00:00 - 01:00	1.00	CIRC	1	DRLIN2	F/C OK SPOT ECD PILL
	01:00 - 06:00	5.00	TRP	2	DRLIN2	TRIP OUT OF HOLE ( STRAP OUT OF HOLE )
	06:00 - 07:00	1.00	TRP	2	DRLIN2	TRIP OUT HOLE RACK BACK ALL BHA
	07:00 - 15:00	8.00	LOG	1	DRLIN2	S/MEETING & RIG UP SCH. LOG OPEN HOLE SECTION W/ PLATFORM EXPRESS W/ LOGGING TOOLS RESISTIVITY, NETRON, PROCITY, GAMARAY, CALIBER NO HOLE PROBLEMS
	15:00 - 16:00	1.00	LOG	1	DRLIN2	RIG DOWN SCH. TOOLS & EQUIPMENT (CALLED GLAYLAND RICH W/ BLM NO ANSWER LEFT MESSAGED ( MESSAGE I TOLD HIM WE WOULD BE RUNNING CASING IN THE NEXT 25 HRS & CMT & TO PLEASE CALL W/ REC. MESSAGE )
	16:00 - 17:00	1.00	TRP	2	DRLIN2	TRIP IN HOLE DROP WIRE BUSH IN STRING POH RET. WIRE BUSH
	17:00 - 20:00	3.00	TRP	2	DRLIN2	TRIP IN HOLE W/ CLEAN OUT ASSEMBLY FILL PIPE EVERY 30 STDS
	20:00 - 21:00	1.00	CIRC	1	DRLIN2	CIR. BOTTOMS UP @ CASING SHOE
	21:00 - 23:30	2.50	TRP	2	DRLIN2	TRIP IN HOLE TO 10616'
	23:30 - 01:00	1.50	CIRC	1	DRLIN2	CIR. OUT ECD PILL @ 10616'
	01:00 - 02:00	1.00	TRP	2	DRLIN2	TRIP IN HOLE TO BOTTOM @ 12155' W/ NO HOLE FILL
	02:00 - 03:30	1.50	CIRC	1	DRLIN2	CIR. OUT ECD PILL
	03:30 - 04:30	1.00	TRP	2	DRLIN2	TRIP OUT OF HOLE TO 9690'
	04:30 - 06:00	1.50	CIRC	1	DRLIN2	PUMP ECD PILL & RIG UP ROCKY MOUNTAIN L/D MACHINE & HOLD S/M
8/10/2008	06:00 - 12:00	6.00	TRP	3	DRLIN2	LAY DOWN DRILL PIPE
	12:00 - 13:00	1.00	TRP	2	DRLIN2	RUN IN HOLE WITH 25 STDS OF 5 DRILL PIPE FROM DERRICK
	13:00 - 17:00	4.00	TRP	3	DRLIN2	LAY DOWN 5 DRILL PIPE & BHA ( CALLED GLAYLAND RICH LEFT MESSAGE SAYING WE ARE RUNNING CASING )
	17:00 - 17:30	0.50	TRP	2	DRLIN2	PULL WEAR BUSHING
	17:30 - 20:00	2.50	CSG	1	DRLIN2	RIG UP ROCKY MOUNTAIN CASING EQUIPMENT & HOLD SAFETY MEETING
8/11/2008	20:00 - 20:30	0.50	CSG	2	DRLIN2	BAKER LOCK SHOE TRACK EQUIPMENT & CHECK FLOAT EQUIPMENT OK
	20:30 - 06:00	9.50	CSG	2	DRLIN2	PICK UP & RUN IN HOLE 7" CASING FILL PIPE EVERY JT & BREAK CIR. EVERY 30 JTS
	06:00 - 07:00	1.00	CSG	2	DRLIN2	CONTINUE TO PICK UP 7" CASING
	07:00 - 07:30	0.50	CMT	1	DRLIN2	LAY DOWN FILL UP TOOL & CASING EQUIPMENT
	07:30 - 09:30	2.00	CIRC	1	DRLIN2	CIR. BOTTOMS UP DURING CIR. LOST RETURNS
	09:30 - 12:00	2.50	DEQ	4	DRLIN2	INSTALL CAMERON SEAL ASSY. & P/TEST TO 10000 PSI
	12:00 - 15:30	3.50	CMT	1	DRLIN2	S/M & R/UP HAL. CMT. HEAD & LINES
	15:30 - 21:30	6.00	CMT	2	DRLIN2	PUMP 10 BBLS FRESH WATER PUMP 30 BBLS SUPER FLUSH XLC, PUMP 10 BBLS WATER BEHIND PUMP 30 BBLS FOAM SCA. @ 14.3 FOAMED TO 7 PPG PUMP 1ST FOAM LEAD @ 14.3 PPG FOAMED @ 9.5 PPG 121 BBLS, PUMP 2ND FOAM LEAD @ 14.3 FOAMED @ 11 PPG 206 BBLS PUMP 35.6 BBLS UNFOAMED TAIL LEAD @ 14.3 PPG DROP PLUG DISPLACE W/ W/BASE MUD 456.7 BBLS BUMP

## Operations Summary Report

Legal Well Name: GH 7D-19-8-21  
 Common Well Name: GH 7D-19-8-21  
 Event Name: DRILLING  
 Contractor Name: Unit Drilling Co.  
 Rig Name: UNIT

Start: 6/10/2008  
 Rig Release:  
 Rig Number: 328

Spud Date: 6/10/2008  
 End:  
 Group:

Date	From - To	Hours	Code	Sub Code	Phase	Description of Operations
8/11/2008	15:30 - 21:30	6.00	CMT	2	DRLIN2	PLUG ATT. TO HOLD 1100 PSI, FOR 15 MIN. W/ NO SUCESS RELEASE PRESSURE BACK FLOW SHUT IN WELL OBSERVE PUMP CAP CMT PUMP PRESSURE INCREASED TO 700 PSI ( PUMP TOTAL 55 BBLs )
8/12/2008	21:30 - 06:00	8.50	CMT	2	DRLIN2	WAIT ON CEMENT
	06:00 - 07:00	1.00	CSG	1	DRLPRO	LAY DOWN CEMENT HEAD
	07:00 - 08:00	1.00	CSG	1	DRLPRO	LAY DOWN LANDING JT & INSULATION TOOL
	08:00 - 09:00	1.00	RIG	6	DRLPRO	CUT & SLIP DRILLING LINE
	09:00 - 09:30	0.50	TRP	1	DRLPRO	CHANGE OUT SAVER SUB TO 4" XT-39 ( CALLED GLAYLAND RICH LEFT MESSAGE RIG IS P/TESTING BOPS )
	09:30 - 15:30	6.00	BOP	2	DRLPRO	S/M & P/TEST BOPS W/ 250 LOW & 10000 PSI HIGH TEST & CHOKE MANIFOLD
	15:30 - 17:30	2.00	OTH		DRLPRO	CHANGE OUT LOW PRESSURE TO HIGH PRES. ROTATING HEAD ASSEMBLY
8/13/2008	17:30 - 19:00	1.50	TRP	1	DRLPRO	S/M & PICK UP 4" BHA & DRILL STRING FROM PIPE RACK
	19:00 - 20:30	1.50	TRP	2	DRLPRO	S/M & RIG UP ROCKY MOUNTAIN LAY DOWN MACHINE ( LAY DOWN MACHINE WAS CALLED OUT TO BE ON LOCATION @ 1700 HRS ) ARRIVED ON LOCATION @ 1900 HRS.
	20:30 - 06:00	9.50	TRP	2	DRLPRO	PICK UP DRILL STRING FROM PIPE RACK
	06:00 - 09:30	3.50	TRP	2	DRLPRO	PICK UP 4" DRILL PIPE FROM RACK
	09:30 - 10:00	0.50	OTH		DRLPRO	RIG DOWN ROCKY MOUNTAIN LAY DOWN MACHINE
	10:00 - 10:30	0.50	TRP	2	DRLPRO	INSTALL ROTATING RUBBER
	10:30 - 11:30	1.00	DRL	4	DRLPRO	DRILL OUT SHOE TRACK EQUIPMENT
	11:30 - 12:00	0.50	DRL	1	DRLPRO	DRILL NEW HOLE F/ 12155 TO 12160
	12:00 - 13:00	1.00	CIRC	1	DRLPRO	CIR & CONDITION MUD TO CARRY OUT FIT
	13:00 - 13:30	0.50	EQT	2	DRLPRO	PERFORM FIT TEST EQU. TO 15.5 PPG OK
	13:30 - 02:00	12.50	OTH		DRLPRO	CLEAN MUD TANKS & PREPARE TO TRANSFER OBM TO MUD TANKS
	02:00 - 06:00	4.00	CIRC	1	DRLPRO	TRANSFER OBM F/ STALLION TANKS TO RIG TANKS & RAISE MUD WT TO 14.2 PPG
	06:00 - 08:00	2.00	CIRC	1	DRLPRO	CIRCULATE AND BRING MUD WEIGHT UP TO 14.0+
	08:00 - 09:00	1.00	CIRC	1	DRLPRO	DIS-PLACE HOLE WITH OIL BASE MUD
8/14/2008	09:00 - 09:30	0.50	RIG	1	DRLPRO	SERVICE RIG, TOP DRIVE, BLOCKS, SWIVEL
	09:30 - 18:00	8.50	DRL	1	DRLPRO	DRILL 12,160 TO 12,297 (ROP 16.7' HR) WOB 5-14, DHRPM 80-125, BG GAS 750
	18:00 - 19:30	1.50	DRL	1	DRLPRO	DRILL 12,297 TO 12,306 (ROP 6' HR) WORK ALL DIFFERNT PERAMETERS TO GET TO DRILL--NO LUCK
	19:30 - 20:00	0.50	SUR	1	DRLPRO	DROP SURVEY
	20:00 - 21:00	1.00	CIRC	1	DRLPRO	SPOT 50 BBL.S 15.0 ECD SLUG ON BOTTOM
	21:00 - 02:30	5.50	TRP	10	DRLPRO	TRIP OUT OF HOLE FOR BIT AND TO RUN CBL LOG
	02:30 - 06:00	3.50	LOG	2	DRLPRO	RUN CEMENT BOND LOG, TOP OF CEMENT 7,434
	06:00 - 07:00	1.00	LOG	2	DRLPRO	FINISH RUNNING CEMENT BOND LOG CEMENT TOP @ 7,434 AND RIG DOWN LOGGER
	07:00 - 08:00	1.00	TRP	1	DRLPRO	PICK UP MOTOR, BIT AND STABILIZER @ 60' FOR PENDELIEM
	08:00 - 10:30	2.50	TRP	1	DRLPRO	TRIP IN HOLE FILL @ BHA AND 7158
	10:30 - 11:00	0.50	CIRC	1	DRLPRO	FILL PIPE AND CIRULATE OUT TRIP SLUG
	11:00 - 13:00	2.00	TRP	10	DRLPRO	TRIP I HOLE FROM 7,158 TO 12,180
	13:00 - 13:30	0.50	REAM	1	DRLPRO	WASH FROM 12,180 TO 12,306
	13:30 - 14:30	1.00	CIRC	1	DRLPRO	BREAK IN BIT AND CIRCULATE BOTTOMS UP
8/15/2008	14:30 - 06:00	15.50	DRL	1	DRLPRO	DRILL FROM 12,306 TO 12,446 (ROP 9' HR) WOB 5-11, DHRPM 90-133, MW 14.1, VIS 46, BG GAS 129 ON BUSTER, CON GAS 3600 UNIT WITH 8' FLARE, HOLE SEEPING 3 BBL.S HR
	06:00 - 08:00	2.00	DRL	1	DRLPRO	DRILL FROM 12,446 TO 12,467 (ROP 10.5' HR) WOB 12-14, DHRPM

## Operations Summary Report

Legal Well Name: GH 7D-19-8-21  
 Common Well Name: GH 7D-19-8-21  
 Event Name: DRILLING  
 Contractor Name: Unit Drilling Co.  
 Rig Name: UNIT

Start: 6/10/2008  
 Rig Release:  
 Rig Number: 328

Spud Date: 6/10/2008  
 End:  
 Group:

Date	From - To	Hours	Code	Sub Code	Phase	Description of Operations
8/16/2008	06:00 - 08:00	2.00	DRL	1	DRLPRO	130, MW 14.1, VIS 44 BG GAS 375
	08:00 - 08:30	0.50	RIG	1	DRLPRO	SERVICE RIG
	08:30 - 18:30	10.00	DRL	1	DRLPRO	DRILL FROM 12,467 TO 12,525 (ROP 5.8' HR) WOB 12-15, DHRPM 130, MW 14.3, VIS 44-- BG GAS 1350 CONNECTION FLARE 35' DRILLED SOME AGRESSIVE SAND
	18:30 - 19:00	0.50	SUR	1	DRLPRO	DROP SURVEY AND FLOW CHECK- WELL FLOWING RESUME DRILLING BRING MW UP TO 14.5
	19:00 - 20:00	1.00	DRL	1	DRLPRO	DRILL FROM 12,525 TO 12,534 (ROP 9" HR) WOB 15, DHRPM 130, MW 14.5, VIS 44- CONNECTION FLARE 35'- HAD 16 BBL GAIN ON BOTTOMS UP
	20:00 - 20:30	0.50	CIRC	1	DRLPRO	SPOT ECD SLUG--50 BBLs 16.0 PPG
	20:30 - 01:00	4.50	TRP	10	DRLPRO	TRIP OUT OF HOLE FOR BIT
	01:00 - 02:00	1.00	TRP	1	DRLPRO	L/D MOTOR & BIT AND P/U NEW MOTOR AND BIT
	02:00 - 05:30	3.50	TRP	10	DRLPRO	TRIP IN HOLE FILL @ BHA AND 7250
	05:30 - 06:00	0.50	CIRC	1	DRLPRO	CIRCULATE OUT TRIP SLUG @ 7250
8/17/2008	06:00 - 07:30	1.50	TRP	10	DRLPRO	TRIP IN TO SHOE
	07:30 - 08:30	1.00	CIRC	1	DRLPRO	INSTALL ROT RUBBER AND CIRCULATE @ SHOE WHILE WORK ON INTER LOCK ON TOP DRIVE
	08:30 - 10:00	1.50	REAM	1	DRLPRO	WASH FROM CASING SHOE (12,180) TO 15,534 HAD 35' FLARE ON BOTTOMS UP
	10:00 - 12:30	2.50	DRL	1	DRLPRO	DRILL FROM 12,534 TO 12,563 (ROP 11.6' HR) WOB 6-8, DHRPM 120, MW 14.4, VIS 44, BG GAS 2600, 35 FLARE ON CONNECTION
	12:30 - 13:30	1.00	RIG	1	DRLPRO	RIG SERVICE, TOP DRIVE, SWIVEL, BLOCKS (WELD EAR ON BAIL)
	13:30 - 18:00	4.50	DRL	1	DRLPRO	DRILL FROM 12,563 TO 12,641 (ROP 17.3' HR) WOB 6-10, DHRPM 95-130, MW 14.4, VIS 45, BG GAS 440,
	18:00 - 06:00	12.00	DRL	1	DRLPRO	DRILL FROM 12,641 TO 12,986 (ROP 28.8' HR ) WOB 6-8, DHRPM 90-95, MW 14.4, VIS 44, BG GAS 845 HAD SOME SLIP STICK 12,785-12,850
	06:00 - 08:30	2.50	DRL	1	DRLPRO	DRILL FROM 12,986 TO 13,041 (ROP 22' HR)
	08:30 - 09:00	0.50	RIG	1	DRLPRO	RIG SERVICE TOP DRIVE, SWIVEL BLOCKS, CROWN
	09:00 - 12:30	3.50	DRL	1	DRLPRO	DRILL FROM 13,041 TO 13084 (ROP 12.3' HR) WOB 6-15, DHRPM 110-130, MW 14.3, VIS 41, BG GAS 650
8/18/2008	12:30 - 13:00	0.50	SUR	1	DRLPRO	DROP SURVEY ON TRIP @ 13,025 2.9 DEG, 173.4 AZ
	13:00 - 14:30	1.50	CIRC	1	DRLPRO	CIR BOTTOMS UP AND SPOT ECD SLUG
	14:30 - 19:00	4.50	TRP	10	DRLPRO	TRIP OUT OF HOLE FOR BIT
	19:00 - 20:00	1.00	TRP	1	DRLPRO	LAY DOWN AND PICK MOTOR AND BIT- CLEAN RIG FLOOR
	20:00 - 00:30	4.50	TRP	10	DRLPRO	TRIP IN HOLE FILL @ BHA, 7,400
	00:30 - 02:00	1.50	RIG	6	DRLPRO	CUT AND SLIP DRILLING LINE--12 WRAPS
	02:00 - 03:00	1.00	CIRC	1	DRLPRO	CIRCULATE @ SHOE--TRIP SLUG OUT OF HOLE PUMP STAGE UP PUMP SLOW
	03:00 - 03:30	0.50	TRP	10	DRLPRO	TRIP IN HOLE TO 12,942
	03:30 - 04:00	0.50	REAM	1	DRLPRO	WASH FROM 12,942 TO 13084-NO HOLE FILL
	04:00 - 04:30	0.50	CIRC	1	DRLPRO	CIRCULATE OUT ECD SLUG
8/19/2008	04:30 - 06:00	1.50	DRL	1	DRLPRO	DRILL FROM 13,084 TO 13,108 (ROP 16' HR) WOB 5-7, DHRPM 134, MW 14.3, VIS 43, BG GAS 1500
	06:00 - 14:30	8.50	DRL	1	DRLPRO	DRILL FROM 13,108 TO 13,323 (ROP 25.3' HR) WOB 5-9, DHRPM 138, MW 14.3+, VIS 42 BG GAS 1050 ON BUSTER, CON FLARE 35' SERVICE RIG AND TOP DRIVE
	14:30 - 15:00	0.50	RIG	1	DRLPRO	SERVICE RIG AND TOP DRIVE
	15:00 - 18:00	3.00	DRL	1	DRLPRO	DRILL FROM 13,323 TO 13,396 (ROP 24.3' HR) WOB 5-8, DHRPM 125, MW 14.3, VIS 41, BG GAS 850 ON BUSTER, CON FLARE 35'--HAVE SLIGHT FLOW ON CONNECTIONS
	18:00 - 06:00	12.00	DRL	1	DRLPRO	DRILL FROM 13,396 TO 13,896 (ROP 41.7' HR) WOB 9, DHRPM 148, MW 14.3, VIS 42, BG GAS 875 ON BUSTER, CON 25' FLARE

## Operations Summary Report

Legal Well Name: GH 7D-19-8-21  
 Common Well Name: GH 7D-19-8-21  
 Event Name: DRILLING  
 Contractor Name: Unit Drilling Co.  
 Rig Name: UNIT

Start: 6/10/2008  
 Rig Release:  
 Rig Number: 328

Spud Date: 6/10/2008  
 End:  
 Group:

Date	From - To	Hours	Code	Sub Code	Phase	Description of Operations
8/20/2008	06:00 - 15:30	9.50	DRL	1	DRLPRO	DRILL FROM 13,896 TO 14,273 (ROP 39.7' HR) WOB 5-9, DHRPM 141, MW 14.4, VIS 42, BG GAS
	15:30 - 16:00	0.50	RIG	1	DRLPRO	SERVICE RIG AND TOP DRIVE
	16:00 - 18:00	2.00	DRL	1	DRLPRO	DRILL FROM 14,273 TO 14,327 (ROP 27' HR) WORKING SAME PERAMETERS
	18:00 - 03:30	9.50	DRL	1	DRLPRO	DRILL FROM 14,327 TO 14,606 (ROP 31' HR) WOB 5-8, DHRPM 141, MW 14.6, VIS 42, BG 4900 UNITS, PRESSURE UP STALLED MOTOR @ 14,588, RESTART WITH LIGHT WEIGHT DRILLING AHEAD WITH LIGHT WEIGHT, ON BOTTOMS UP FROM FRACTURE FLARE INCREASED FROM 5' TO 12-15' AND LOST 300 PSI ON PUMP, GAINED 16 BBL.S PICK UP AND CIRCULATE BRING MW UP TO 14.8 NEVER REGAINED PRESSURE AND HAD RUBBER COME OVER SHAKER (MOTOR FAILURE)
	03:30 - 06:00	2.50	CIRC	1	DRLPRO	CIRCULATE WHILE BRING MW UP TO 14.8 AND SPOT ECD SLUG TO COVER OPEN HOLE
8/21/2008	06:00 - 06:30	0.50	CIRC	1	DRLPRO	SPOT ECD SLUG
	06:30 - 11:30	5.00	TRP	12	DRLPRO	TRIP OUT FOR MOTOR FAILURE
	11:30 - 12:30	1.00	TRP	1	DRLPRO	LAY DOWN AND PICK MOTOR AND BIT
	12:30 - 17:30	5.00	TRP	12	DRLPRO	TRIP IN HOLE FILL @ BHA AND 7025 TO SHOE
	17:30 - 18:00	0.50	CIRC	1	DRLPRO	CIRCULATE ON TRIP SLUG
	18:00 - 18:30	0.50	RIG	1	DRLPRO	SERVICE RIG--CHANGE OUT LINE GUIDE SHIEVE
	18:30 - 20:00	1.50	TRP	1	DRLPRO	TRIP IN TO 14562 FROM SHOE --SLICK ALL THE WAY IN
	20:00 - 20:30	0.50	REAM	1	DRLPRO	WASH FROM 14,562 TO 14,606
	20:30 - 21:30	1.00	CIRC	1	DRLPRO	CIRCULATE ECD SLUG OUT OF HOLE HAD 80 BBL. GAIN AND 85-100' FLARE
	21:30 - 06:00	8.50	DRL	1	DRLPRO	DRILL FROM 14,606 TO 14800 (ROP 22.8' HR) WOB 5-9, DHRPM 120, MW 14.7, VIS 43, BG GAS 5300 UNITS 5'-12' FLARE CON FLARE 25'
8/22/2008	06:00 - 12:30	6.50	DRL	1	DRLPRO	DRILL FROM 14,800 TO 14,942 (ROP 21.8' HR) WOB 5-9, DHRPM 119, MW 14.7, VIS 42, BG GAS 5250 10 FT FLARE, HOLE SEEPING 1-2 BBL.S HR PUMPING 10-20 BL LCM SWEEPS
	12:30 - 13:30	1.00	RIG	1	DRLPRO	SERVICE RIG AND TOP DRIVE WORK ON TOP DRIVE HYDRALIC LINE--LEAKING
	13:30 - 18:00	4.50	DRL	1	DRLPRO	DRILL FROM 14,942 TO 15,065 (27.3' HR) WOB 5-8, DHRPM 120, MW 14.7, VIS 41, BG GAS 5250 10-15' FLARE, HOLE SEEPING 1-2 BBL.S HR
	18:00 - 06:00	12.00	DRL	1	DRLPRO	DRILL FROM 15,065 TO 15,368 (ROP 25.3' HR) WOB 5-8, DHRPM 120, MW 14.8, VIS 41, BG GAS 5025, 10' FLARE, HOLE SEEPING 1-2 BBL.S HR
8/23/2008	06:00 - 11:30	5.50	DRL	1	DRLPRO	DRILL FROM 15,368 TO 15,520 (ROP 27.6' HR) WOB 5-9, DHRPM 120, MW 14.8, VIS 41, BG GAS 5100 UNITS DRILLING FLARE 8', CON FLARE 15-20
	11:30 - 12:00	0.50	RIG	1	DRLPRO	SERVICE RIG, BLOCKS, TOP DRIVE, SWIVEL
	12:00 - 18:00	6.00	DRL	1	DRLPRO	DRILL FROM 15,520 TO 15,700 (ROP 30' HR) WORK SAME PERAMETERS
	18:00 - 06:00	12.00	DRL	1	DRLPRO	DRILL FROM 15,700 TO 15,993 (ROP 24.4' HR) REDUCED PUMP RATE AND PUMPING LCM SWEEPS FOR LOSSES, LOST IN LAST 24 HR.S 145 BL.S MW 14.8, VIS 41 BG GAS 6100 UNITS DRILLING FLARE 5-10'-- LOSSING 4-5 BBL.S HR AT REPORT TIME
8/24/2008	06:00 - 14:30	8.50	DRL	1	DRLPRO	DRILL FORM 15,993 TO 16,185 (ROP 22.6' HR) WOB 7-9, DHRPM 118, MW 14.8, VIS 42, BG GAS 7200 5' FLARE, CON FLARE 25-30, HOLE SEEPING 5 BBL.S HR, PUMPING LCM SWEEPS TO HEAL



## Operations Summary Report

Legal Well Name: GH 7D-19-8-21  
 Common Well Name: GH 7D-19-8-21  
 Event Name: DRILLING  
 Contractor Name: Unit Drilling Co.  
 Rig Name: UNIT

Start: 6/10/2008  
 Rig Release:  
 Rig Number: 328

Spud Date: 6/10/2008  
 End:  
 Group:

Date	From - To	Hours	Code	Sub Code	Phase	Description of Operations
8/24/2008	06:00 - 14:30	8.50	DRL	1	DRLPRO	HOLE
	14:30 - 15:00	0.50	RIG	1	DRLPRO	SERVICE RIG
	15:00 - 18:00	3.00	DRL	1	DRLPRO	DRILL FROM 16,185 TO 16,270 (ROP 28.3' HR)WOB 7-10, DHRPM 118, MW 14.8, VIS 41, BG GAS 7250 UNIT FLARE 5'-8', CON FLARE 25-30 SEEPING 3-4 BBL.S HR. BY PASSED SHAKERS
8/25/2008	18:00 - 06:00	12.00	DRL	1	DRLPRO	DRILL FROM 16,270 TO 16,615 (ROP 28' HR) WORK SAME PERAMETERS BG GAS 6879 UNITS, 6' FLARE, CON GAS 8360- 20' FLARE--HOLE SEEPING 3-4 BBL.S HR SHAKERS BY PASSED WITH 3% LCM IN SYSTEM--SEEPAGE HAS SLOWED DOWN
	06:00 - 17:30	11.50	DRL	1	DRLPRO	DRILL FROM 16,615 TO 16,887 (ROP 23.7' HR)
	17:30 - 18:00	0.50	SUR	1	DRLPRO	DROP SURVEY @ 16,810
	18:00 - 19:30	1.50	CIRC	1	DRLPRO	CIRCULATE BOTTOMS UP AND SPOT ECD SLUG
	19:30 - 03:00	7.50	TRP	10	DRLPRO	TRIP OUT OF HOLE-- HOLE 6.2 BBL.S SHY ON HOLE FILL- TRIP OUT
8/26/2008	03:00 - 04:00	1.00	TRP	1	DRLPRO	CHANGE BHA LAY DOWN MOTOR, BIT, 2- OX IBS AND MONEL, PICK UP FLOAT SUB, CIRC SUB MOTOR AND BIT
	04:00 - 06:00	2.00	TRP	10	DRLPRO	TRIP IN HOLE FILL @ BHA
	06:00 - 09:30	3.50	TRP	10	DRLPRO	TRIP IN HOLE FILL @ 5473 AND AT SHOE 12,325
	09:30 - 10:00	0.50	RIG	1	DRLPRO	SERVICE RIG AND TOP DRIVE
	10:00 - 11:30	1.50	CIRC	1	DRLPRO	CIRCULATE BOTTOMS UP @ SHOE @ SLOW RATE BECAUSE OF WOBBLE BIT
	11:30 - 12:30	1.00	TRP	10	DRLPRO	TRIP IN TO 14,615
	12:30 - 14:00	1.50	CIRC	1	DRLPRO	CIRCULATE BOTTOMS UP @ 14,615 33 BBL. GAIN AND 70' FLARE
	14:00 - 15:00	1.00	TRP	10	DRLPRO	TRIP IN TO 16,817
	15:00 - 15:30	0.50	REAM	1	DRLPRO	WASH FROM 16,817 TO 16,887-- NO HOLE FILL
	15:30 - 16:30	1.00	CIRC	1	DRLPRO	CIRCULATE BOTTOMS UP- HAD 25' FLARE 12 BBL GAIN
	16:30 - 20:00	3.50	DRL	1	DRLPRO	DRILL FROM 16,887 TO 16,911(ROP 6.8') WOB 3-4, DHRPM 435, MW 14.8+, VIS 42, BG GAS 5550 UNITS 8' FLARE
	20:00 - 20:30	0.50	RIG	2	DRLPRO	REPAIR BOTH POP OFFS ON MUD PUMPS
	20:30 - 06:00	9.50	DRL	1	DRLPRO	DRILL FROM 16,911 TO 16,951 (ROP 4.2' HR) WOB 4-5 DHRPM 435, MW 14.8+, VIS 43, BG GAS 5364
	06:00 - 15:00	9.00	DRL	1	DRLPRO	DRILL FROM 16,951 TO 17,007 (ROP 6.2' HR) WOB 4-6, DHRPM 425, MW 14.8+, VIS 42, BG GAS 5450 UNITS 5'-8' FLARE
8/27/2008	15:00 - 15:30	0.50	RIG	1	DRLPRO	SERVICE RIG, TOP DRIVE, BLOCKS, SWIVEL & DRAW TOOL
	15:30 - 06:00	14.50	DRL	1	DRLPRO	DRILL FROM 17,007 TO 17,074 (ROP 4.6' HR) WOB 4-6, DHRPM 425, MW 14.8+, VIS 41, BG GAS 5650 UNITS 5-8' FLARE STALLED MOTOR TWICE @ 17,071 HAD TO PULL 25,000 OVER PULL TO GET FREE--FRACTURE
	06:00 - 13:30	7.50	DRL	1	DRLPRO	DRILL 17,074 TO 17,100 (ROP 3.5' HR) WOB 4-6, DHRPM 425, MW 14.8, VIS 42,
	13:30 - 15:30	2.00	CIRC	5	DRLPRO	CIRCULATE UP SAMPLE @ TD
	15:30 - 16:30	1.00	TRP	14	DRLPRO	SHORT TRIP 10 STDS
	16:30 - 18:30	2.00	CIRC	1	DRLPRO	CIR. BOTTOMS UP & SPOT ECD PILL
	18:30 - 01:30	7.00	TRP	2	DRLPRO	TRIP OUT OF HOLE FOR MCR LOGS (STRAP OUT OF HOLE), MOTOR WOULD N'T DRAIN AFTER 47 STANDS OUT, DROPPED BALL TO SHEAR PIN IN PUMP OUT SUB AND PIPE PULLED DRY THE REST OF THE WAY OUT (SLM 17,087)
	01:30 - 03:00	1.50	TRP	1	DRLPRO	LAY DOWN MOTOR, PUMP OUT SUB, FLOAT SUB AND BIT, AND PICKED UP BIT SUB, X-OVER, UBHO AND MCR
	03:00 - 06:00	3.00	TRP	2	DRLPRO	COLLAR--ORIENTATED TOOL
						TRIP IN HOLE FILL @ BHA AND EVERY 2 ROWS--CERAMIC ON MCR COLLAR IS PRESSURE SENSITIVE

## Operations Summary Report

Legal Well Name: GH 7D-19-8-21  
 Common Well Name: GH 7D-19-8-21  
 Event Name: DRILLING  
 Contractor Name: Unit Drilling Co.  
 Rig Name: UNIT

Start: 6/10/2008  
 Rig Release:  
 Rig Number: 328  
 Spud Date: 6/10/2008  
 End:  
 Group:

Date	From - To	Hours	Code	Sub Code	Phase	Description of Operations
8/29/2008	06:00 - 09:00	3.00	LOG	1	EVALPR	TRIP IN HOLE TO SHOE FILL PIPE EVERY 2 ROWS AND CHANGE OUT ROTATING HEAD
	09:00 - 10:30	1.50	RIG	6	EVALPR	CUT AND SLIP 11 WRAPS OF DRILLING LINE
	10:30 - 18:30	8.00	LOG	1	EVALPR	RUN OPEN HOLE LOGS MCR TOOLS ON END OF DRILL STRING--CIRCULATE EVERY STAND DOWN TO BOTTOM TO KEEP LOGGING TOOL COOLED
	18:30 - 20:00	1.50	CIRC	1	EVALPR	CIRCULATE BOTTOMS UP FROM 17,100'--
	20:00 - 04:00	8.00	LOG	1	EVALPR	LOG UP W/ DRILL PIPE TO CASING SHOE
8/30/2008	04:00 - 05:00	1.00	CIRC	1	EVALPR	CIR. & SPOT ECD PILL
	05:00 - 06:00	1.00	TRP	2	EVALPR	TRIP TO 5000' TO RET. SURVEY TOOL
	06:00 - 07:00	1.00	TRP	2	DRLPRO	TRIP OUT OF HOLE TO 5,123' TO RETREIVE LOGGING TOOL
	07:00 - 08:00	1.00	LOG	1	DRLPRO	RETIEVE MCR LOGGING BARREL WITH SLICK LINE
	08:00 - 13:00	5.00	TRP	2	DRLPRO	TRIP IN HOLE FILL EVERY 2,000' --RECEIVED CALL FROM OFFICE TO DRILL AHEAD ANOTHER 30' CALLED BLM ( GAYLAND RICH ) TO NOTIFY RUNNING 4.5 CASING * CEMENTING LEFT MESSAGE TWICE
8/31/2008	13:00 - 20:00	7.00	DRL	1	DRLPRO	DRILL FROM 17,100 TO 17,130 (ROP 4.2' HR)WOB 18, DHRPM 60, MW 14.8+, VIS 41, BG GAS 4,000 UNITS
	20:00 - 22:00	2.00	CIRC	5	DRLPRO	CIRCULATE BOTTOMS UP FOR SAMPLE (SOME SAND STONE IN SAMPLE)
	22:00 - 02:30	4.50	TRP	2	DRLPRO	TRIP OUT OF HOLE WITH DRILL PIPE-RACK IN DERRICK- LAY DOWN AFTER CASING IS RAN
	02:30 - 04:00	1.50	TRP	1	DRLPRO	CHANGE OUT MOUSE HOLE AND RIG UP L/D TRUCK TO LAY DOWN BHA
	04:00 - 06:00	2.00	TRP	1	DRLPRO	LAY DOWN BHA WITH LAY DOWN TRUCK
9/1/2008	06:00 - 07:30	1.50	TRP	2	CSGPRO	PULL HIGH PRESSURE ROTATING HEAD RET. WEAR BUSHING INSTALL HIGH PRESSURE ROT. HEAD ( CALLED BLM ( GAYLAND RICH ) LEFT MESSAGE
	07:30 - 10:30	3.00	CSG	1	CSGPRO	S/M & R/UP ROCKY MOUNTAIN CASING CREW
	10:30 - 20:00	9.50	CSG	2	CSGPRO	PICK UP CHECK FLOAT EQUIPMENT OK PICK UP 4.5 CASING F/ PIPE RACK
	20:00 - 21:00	1.00	CIRC	1	CSGPRO	CIR. BOTTOMS UP @ CASING SHOE
	21:00 - 23:30	2.50	CSG	2	CSGPRO	RUN IN HOLE W/ CASING TO 14502'
9/1/2008	23:30 - 00:30	1.00	CIRC	1	CSGPRO	CIR. OUT ECD PILL
	00:30 - 04:00	3.50	CSG	2	CSGPRO	RUN IN HOLE W/ CASING TO BOTTOM ( TAG BOTTOM )
	04:00 - 05:30	1.50	CMT	1	CSGPRO	R/D ROCKY MOUNTAIN & R/UP CEMENT HEAD
	05:30 - 06:00	0.50	CIRC	1	CSGPRO	CIR. OUT ECD PILL
	06:00 - 06:30	0.50	CIRC	1	EVALPR	CIR. OUT ECD PILL
9/1/2008	06:30 - 09:30	3.00	CMT	2	EVALPR	S/M & R/UP CEMENT HEAD & P/TEST LINES TO 10000 PSI OK PUMP 40 15 PPG TUNED SPACER @ 4 BPM, PUMP 750 SKS LEAD CMT @ 15.2 PPG ( TOC 4555' ) FLUSH OUT LINES TO PIT, DROP TOP PLUG, DISPLACE W/ 242.1 BBLs BUMP PLUG W/ 7000 PSI P/TEST PLUG W/ 8000 PSI 30 MIN. CHECK FLOATS BLED BACK 7 BBLs
	09:30 - 17:30	8.00	WOT	1	EVALPR	OBSERVE FLOW SHUT IN WELL W/ 200 PSI WELL SHUT IN OBSERVE PRESSURE INCREASED TO 685 PSI STABLE FOR ONE HOUR BLEED OFF PRESSURE NO FLOW ( DURING WOC L/D 4" DRILL PIPE FROM DERRICK & CLEAN MUD TANKS & MOVE 12 LOADS TO NEW LOCATION
	17:30 - 19:00	1.50	TRP	3	EVALPR	L/D 4" DRILL PIPE F/ MOUSEHOLE
	19:00 - 20:00	1.00	CMT	1	EVALPR	R/D CMT HEAD
	20:00 - 04:00	8.00	CSG	7	EVALPR	NIPPLE DN FLOW LINE, CHOKE LINE & REMOVE DRIP PANS & RE-PIN BOP WINCH BEAMS HOOK UP WINCH TO BOPS BREAK

## Operations Summary Report

Legal Well Name: GH 7D-19-8-21  
 Common Well Name: GH 7D-19-8-21  
 Event Name: DRILLING  
 Contractor Name: Unit Drilling Co.  
 Rig Name: UNIT

Start: 6/10/2008      Spud Date: 6/10/2008  
 Rig Release:          End:  
 Rig Number: 328      Group:

Date	From - To	Hours	Code	Sub Code	Phase	Description of Operations
9/1/2008	20:00 - 04:00	8.00	CSG	7	EVALPR	OUT BOPS CONNECTION LIFT BOPS ( USING UNITS WINCHES FOR THE FIRST TIME ) SET SLIPS 195,000 & PACK OFF ASSEMBLY LOWER STACK
9/2/2008	04:00 - 06:00	2.00	TRP	3	EVALPR	L/D 4" DRILL PIPE F/ MOUSEHOLE
	06:00 - 19:00	13.00	TRP	2	CSGPRO	LAY DOWN 4" DRILL PIPE FROM MOUSEHOLE & FINISH CLEANING MUD TANKS
	19:00 - 06:00	11.00	LOC	4	RDMO	CLEAN RIG FLOOR, BREAK CONNECTIONS ON TOP DRIVE, LAY DOWN TOP DRIVE & SWIVEL KELLY HOSE, ELECTRIC CABLES, R/D MUD TANKS RIG RELEASE @ 0600 9/2/2008 ( MOVE 8 LOADS TO NEW LOCATIONS )

## Operations Summary Report - COMPLETION

Well Name: GH 7D-19-8-21  
 Location: 19- 8-S 21-E 26  
 Rig Name:

Spud Date: 6/10/2008  
 Rig Release:  
 Rig Number:

Date	From - To	Hours	Code	Sub Code	Description of Operations
9/8/2008	08:00 - 03:00	19.00	LOG	2	MIRU SLB ELU. MU AND RIH WITH NEUTRON POROSITY LOGGING TOOLS. LOG FROM PBTD @ 17,130' TO 5,000' WHILE HOLDING 0 PSI. (BHT 299') RDMO ELU.
9/9/2008	06:00 - 14:00	8.00	LOG	2	MIRU LONE WOLF ELU. MU AND RIH WITH CCL/GR/CBL/VDL LOGGING TOOLS. LOG FROM PBTD @ 17,137' TO 1,900' WHILE HOLDING 4,000 PSI. (BHT 300*). TOC EST @ 5,000'. CMT LOOKED GOOD UP TO 7,280', MARGINAL CMT TO 1,900'. RDMO ELU.
	14:00 - 19:00	5.00	EQT	1	NU 4 1/16" 15K FRAC TREE WITH SCHOONER HCR & STINGER FRAC HEAD. PRESSURE TEST CSG & FRAC TREE TO 10,000 PSI. PRESSURE TEST 4 1/2" X 7" ANNULUS TO 3,000 PSI. BOTH TESTS GOOD. SET WORK STAND.
9/10/2008	09:00 - 10:00	1.00	LOC	6	SET ANCHORS FOR CTU.
9/11/2008	06:00 - 18:00	12.00	OTH		SPOT & FILL FRAC TANKS.
9/12/2008	07:00 - 15:00	8.00	OTH		SPOT IPS FBE.
9/13/2008	07:00 - 17:00	10.00	OTH		RU IPS FBE& HES WATER MANIFOLD.
9/14/2008	08:00 - 12:00	4.00	PERF	2	MIRU OWP ELU. MU & RIH WITH 7- 2' GUNS LOADED 3 SPF, 120* PHASE. SHOOT 48 HOLES FROM 16,999' TO 17,133' WITH 900 PSI. 900 PSI WITH GUNS ON THE SURFACE.
	12:00 - 18:00	6.00	STIM	2	MIRU HES FRAC EQUIPMENT IN PREPERATION TO START FRACING IN THE MORNING. SDFN
9/15/2008	06:00 - 13:30	7.50	OTH		CROWN VALVE LEAKING ON FRAC TREE. SHUT DOWN AND REPLACED.
	13:30 - 14:30	1.00	STIM	3	FRAC STAGE #1 WITH 1,454 BBLS 35# HYBOR-G CARRYING 71,759 LBS# 30/50 SINTERLITE SAND. AVG RATE= 39.3 BPM. AVG PSI= 10,580.
	14:30 - 17:30	3.00	PERF	2	PERF STG #2 WITH 7- 2' GUN LOADED 3 SPF, 120* PHASE, 11 GRAM CHARGE. SET 3.44" CFP AT 16,900' WITH 8,000 PSI. SHOOT 42 HOLES FROM 16,303' TO 16,883'.
	17:30 - 19:00	1.50	STIM	3	FRAC STAGE #2 WITH 2,444 BBLS SLICKWATER CARRYING 38,184 LBS# 30/50 SINTERLITE SAND. AVG RATE= 33.3 BPM. AVG PSI= 10,872.
	19:00 - 21:30	2.50	PERF	2	PERF STG #3 WITH 7- 2' GUN LOADED 3 SPF, 120* PHASE, 11 GRAM CHARGE. SET 3.44" CBP AT 16,198' WITH 8,300 PSI. SHOOT 42 HOLES FROM 15,600' TO 16,179'.
9/16/2008	21:30 - 06:00	8.50	WOT	4	SDFN
	06:00 - 07:30	1.50	STIM	3	FRAC STAGE #3 WITH 2,338 BBLS SLICKWATER CARRYING 32,767 LBS# 30/50 SINTERLITE SAND. AVG RATE= 35.7 BPM. AVG PSI= 11,007.
	07:30 - 13:00	5.50	PERF	2	PERF STG #4 WITH 7- 2' GUN LOADED 3 SPF, 120* PHASE, 11 GRAM CHARGE. SET 3.44" CFP AT 15,510' WITH 8,500 PSI. SHOOT 42 HOLES FROM 14,896' TO 15,482'. MISS RUN (2 GUNS DIDN'T FIRE). RBIH AND SHOOT TOP 2 GUNS.
	13:00 - 13:45	0.75	STIM	3	FRAC STAGE #4 WITH 1,335 BBLS SLICKWATER CARRYING 12,744 LBS# 30/50 SINTERLITE SAND. AVG RATE= 38.1 BPM. AVG PSI= 10,817. CUT SAND EARLY DUE TO NET PRESSURE INCREASE.
	13:45 - 16:00	2.25	PERF	2	PERF STG #5 WITH 7- 2' GUN LOADED 3 SPF, 120* PHASE, 11 GRAM CHARGE. SET 3.44" CBP AT 14,810' WITH 8,100 PSI. SHOOT 42 HOLES FROM 14,252' TO 14,788'.
	16:00 - 17:30	1.50	STIM	3	FRAC STAGE #5 WITH 2,465 BBLS SLICKWATER CARRYING 38,267 LBS# 30/50 SINTERLITE SAND. AVG RATE= 36.8 BPM. AVG PSI= 10,012.
	17:30 - 20:00	2.50	PERF	2	PERF STG #6 WITH 7- 2' GUN LOADED 3 SPF, 120* PHASE, 11 GRAM CHARGE. SET 3.44" CFP AT 14,160' WITH 7,500 PSI. SHOOT 42 HOLES FROM 13,595' TO 14,138'.
9/17/2008	21:30 - 06:00	8.50	WOT	4	SDFN
	06:00 - 07:15	1.25	STIM	3	FRAC STAGE #6 WITH 2,573 BBLS SLICKWATER CARRYING 45,598 LBS# 30/50 SINTERLITE SAND. AVG RATE= 40.0 BPM. AVG PSI= 9,935.
	07:15 - 09:30	2.25	PERF	2	PERF STG #7 WITH 7- 2' GUN LOADED 3 SPF, 120* PHASE, 11 GRAM CHARGE. SET 3.44" CBP AT 13,500' WITH 7,000 PSI. SHOOT 42 HOLES FROM 12,890' TO

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## Operations Summary Report

Well Name: GH 7D-19-8-21  
 Location: 19- 8-S 21-E 26  
 Rig Name:

Spud Date: 6/10/2008  
 Rig Release:  
 Rig Number:

Date	From - To	Hours	Code	Sub Code	Description of Operations
9/17/2008	07:15 - 09:30	2.25	PERF	2	13,481'.
	09:30 - 11:00	1.50	STIM	3	FRAC STAGE #7 WITH 2,592 BBLS SLICKWATER CARRYING 48,578 LBS# 30/50 SINTERLITE SAND. AVG RATE= 40.7 BPM. AVG PSI= 8,348.
	11:00 - 13:00	2.00	PERF	2	PERF STG #8 WITH 7- 2' GUN LOADED 3 SPF, 120° PHASE, 11 GRAM CHARGE. SET 3.44" CFP AT 12,770' WITH 5,700 PSI. SHOOT 42 HOLES FROM 12,219' TO 12,751'.
	13:00 - 14:00	1.00	STIM	3	FRAC STAGE #8 WITH 2,446 BBLS SLICKWATER CARRYING 43,426 LBS# 30/50 SINTERLITE SAND. AVG RATE= 44.8 BPM. AVG PSI= 7,365.
	14:00 - 16:00	2.00	PERF	2	PERF STG #9 WITH 8- 2' GUN LOADED 3 SPF, 120° PHASE, 11 GRAM CHARGE. SET 3.44" CFP AT 11,710' WITH 4,900 PSI. SHOOT 48 HOLES FROM 11,688'.
	16:00 - 17:00	1.00	STIM	3	FRAC STAGE #9 WITH 2,854 BBLS SLICKWATER CARRYING 70,842 LBS# 30/50 SB EXCEL SAND. AVG RATE= 45.6 BPM. AVG PSI= 6,379.
	17:00 - 18:30	1.50	PERF	2	PERF STG #10 WITH 8- 2' GUN LOADED 3 SPF, 120° PHASE, 11 GRAM CHARGE. SET 3.44" CFP AT 11,125' WITH 3,800 PSI. SHOOT 48 HOLES FROM 10,788' TO 11,113'.
	18:30 - 19:30	1.00	STIM	3	FRAC STAGE #10 WITH 2,795 BBLS SLICKWATER CARRYING 70,952 LBS# 30/50 SB EXCEL SAND. AVG RATE= 44.9 BPM. AVG PSI= 6,355.
	19:30 - 21:00	1.50	PERF	2	PERF STG #11 WITH 5- 2' GUN LOADED 3 SPF, 120° PHASE, 11 GRAM CHARGE. SET 3.44" CFP AT 10,150' WITH 3,600 PSI. SHOOT 30 HOLES FROM 10,084' TO 10,147'.
	21:00 - 21:55	0.92	STIM	3	FRAC STAGE #11 WITH 1,715 BBLS SLICKWATER CARRYING 32,165 LBS# 30/50 SB EXCEL SAND. AVG RATE= 44.8 BPM. AVG PSI = 6,943
	21:55 - 23:30	1.58	PERF	2	PERF STG #12 WITH 4- 2' GUN LOADED 3 SPF, 120° PHASE, 11 GRAM CHARGE. SET 3.44" CFP AT 7,980' WITH 3,700 PSI. SHOOT 24 HOLES FROM 7,584' TO 7,960'.
	23:30 - 00:30	1.00	STIM	3	FRAC STAGE #12 WITH 730 BBLS DELTA FLUID CARRYING 52,342 LBS# 30/50 SB EXCEL SAND. AVG RATE= 45.2 BPM. AVG PSI = 6,166.
	00:30 - 06:00	5.50	LOC	4	RDMO OWP ELU & HES.
	06:00 - 21:00	15.00	LOC	4	MIRU IPS CTU, GCDOE AND SPIRIT FLUIDS. LOAD CT WITH 70° WATER. MU QES 2 7/8" MOTOR/JARS AND 3.55" 5-BLADE JUNK MILL. TEST STACK TO 8,000 PSI. RIH AND DRILL OUT 11 PLUGS IN 7 HOURS TO PSTD DEPTH OF 17,128'. PUMP FINAL SWEEP AND POOH. RDMO IPS CTU, GCDOE & SPIRIT FLUIDS.
9/18/2008	21:00 - 06:00	9.00	PTST	2	FLOWING TO SALES THROUGH IPS FBE.
9/19/2008	06:00 - 06:00	24.00	PTST	2	FLOWING TO SALES THROUGH IPS FBE.
9/20/2008	06:00 - 06:00	24.00	PTST	2	FLOWING TO SALES THROUGH IPS FBE.
9/21/2008	06:00 - 06:00	24.00	PTST	2	FLOWING TO SALES THROUGH IPS FBE.
9/22/2008	06:00 - 06:00	24.00	PTST	2	RDMO IPS FBE. FLOWING TO SALES THROUGH PRODUCTION EQUIPMENT.

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UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENTFORM APPROVED  
OMB NO. 1004-0137  
Expires: July 31, 2010

## WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Dry <input type="checkbox"/> Other						5. Lease Serial No. UTU-68220					
b. Type of Completion: <input checked="" type="checkbox"/> New Well <input type="checkbox"/> Work Over <input type="checkbox"/> Deepen <input type="checkbox"/> Plug Back <input type="checkbox"/> Diff. Resvr..						6. If Indian, Allottee or Tribe Name UTE TRIBE					
Other: _____						7. Unit or CA Agreement Name and No. GYPSUM HILLS					
2. Name of Operator Questar Exploration & Production Co.						8. Lease Name and Well No. GH 7D 19 8 21					
3. Address 11002 EAST 17500 SOUTH - VERNAL, UT 84078						9. AFI Well No. 43-047-38267					
3a. Phone No. (include area code) 435.781.4342 - Dahn Caldwell						10. Field and Pool or Exploratory GYPSUM HILLS					
4. Location of Well (Report location clearly and in accordance with Federal requirements)*  At surface 2036' FNL, 1790' FEL, SWNE, SEC 19-T8S-R21E  2036' FNL, 1790' FEL, SWNE, SEC 19-T8S-R21E  At top prod. interval reported below  At total depth 2036' FNL, 1790' FEL, SWNE, SEC 19-T8S-R21E						11. Sec., T., R., M., on Block and Survey or Area SEC 19-T8S-R21E					
14. Date Spudded 06/07/2008						15. Date T.D. Reached 08/29/2008		16. Date Completed 09/18/2008 <input type="checkbox"/> D & A <input checked="" type="checkbox"/> Ready to Prod.		17. Elevations (DF, RKB, RT, GL)* 4,703' KB	
18. Total Depth: MD 17,130' TVD			19. Plug Back T.D.: MD 17,128' - 9/18/08 TVD			20. Depth Bridge Plug Set: MD TVD			22. Was well cored? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (Submit analysis) Was DST run? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (Submit report) Directional Survey? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (Submit copy)		
21. Type Electric & Other Mechanical Logs Run (Submit copy of each) GR/CBL & Litho/Comp Neutron Array Induction Tool											
23. Casing and Liner Record (Report all strings set in well)											
Hole Size	Size/Grade	Wt. (#/ft.)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No. of Sk. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled		
17-1/2"	13-3/8"	54.5#		536'		500 sxs		Surf - Circ			
12-1/4"	9-5/8"	47#		5,451'		1,990 sxs		Surf - Circ			
8-1/2"	7"	26/29#		12,139'		1,375 sxs		Surf			
6-1/8"	4-1/2"	15.1/16.6		17,130'		750 sxs		5,000' - Log			
24. Tubing Record											
Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)			
N/A			N/A			N/A					
25. Producing Intervals											
Formation		Top		Bottom		26. Perforation Record					
A) SEE ATTACHMENT ONE						Perforated Interval		Size	No. Holes	Perf. Status	
B)						SEE ATTACHMENT ONE					
C)											
D)											
27. Acid, Fracture, Treatment, Cement Squeeze, etc.											
Depth Interval		Amount and Type of Material									
SEE ATTACHMENT ONE		SEE ATTACHMENT ONE									
28. Production - Interval A											
Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method		
9/18/08	9/20/08	24	→	0	4465	1799			FLOWING		
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status			
28/64	0	2900	→					PRODUCING			
28a. Production - Interval B											
Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method		
			→								
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status			
			→								

\*(See instructions and spaces for additional data on page 2)

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## 28b. Production - Interval C

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	
			→						

## 28c. Production - Interval D

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	
			→						

## 29. Disposition of Gas (Solid, used for fuel, vented, etc.)

SOLD

## 30. Summary of Porous Zones (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

## 31. Formation (Log) Markers

Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top
					Meas. Depth
GREEN RIVER	2578'			MANCOS 'B'	13046'
MAHOGANY	3330'			FRONTIER	15876'
WASATCH	6036'			DAKOTA SILT	16796'
MESA VERDE	9359'			DAKOTA	16996'
CASTLEGATE	11825'			MORRISON	16996'
BLACKHAWK	12138'			TD	17130'
MANCOS	12579'				

## 32. Additional remarks (include plugging procedure):

FUTURE OIL SHALE: GREEN RIVER &amp; MAHOGANY

## 33. Indicate which items have been attached by placing a check in the appropriate boxes:

- ☐ Electrical/Mechanical Logs (1 full set req'd.)     
 ☐ Geologic Report     
 ☐ DST Report     
 ☐ Directional Survey  
☐ Sundry Notice for plugging and cement verification     
 ☐ Core Analysis     
☒ Other: ATTACHMENT - PERF & FRAC INFO

## 34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions)\*

Name (please print) JIM SIMONTON

Title COMPLETION SUPERVISOR

Signature

Jim Simonton (GBC)

Date 11/25/2008

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Continued on page 3)

(Form 3160-4, page 2)

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**GH 7D 19-8-21 – ATTACHMENT ONE**  
**PERFORATION DETAIL:**

Open Perfs	Stimulation					Perf Status
7584' – 7586' }	Frac w/	52,342	Lbs in	30,660	Gals	Open – Wasatch
7586' – 7588' }						Open – Wasatch
7956' – 7958' }						Open – Wasatch
7958' – 7960' }						Open – Wasatch
10084' – 10086' }	Frac w/	32,165	Lbs in	72,030	Gals	Open - LMV
10091' – 10093' }						Open - LMV
10118' – 10120' }						Open - LMV
10140' – 10142' }						Open - LMV
10145' – 10147' }						Open - LMV
10788' – 10790' }	Frac w/	70,952	Lbs in	117,390	Gals	Open - LMV
10833' – 10835' }						Open - LMV
10987' – 10989' }						Open - LMV
10989' – 10991' }						Open - LMV
11010' – 11012' }						Open - LMV
11037' – 11039' }						Open - LMV
11042' – 11044' }						Open - LMV
11111' – 11113' }						Open - LMV
11290' – 11292' }	Frac w/	70,842	Lbs in	119,868	Gals	Open - LMV
11314' – 11316' }						Open - LMV
11496' – 11498' }						Open - LMV
11518' – 11520' }						Open - LMV
11534' – 11536' }						Open - LMV
11614' – 11616' }						Open - LMV
11672' – 11674' }						Open - LMV
11686' – 11688' }						Open - LMV
12219' – 12221' }	Frac w/	43,426	Lbs in	102,732	Gals	Open - Blackhawk
12296' – 12298' }						Open - Blackhawk
12382' – 12384' }						Open - Blackhawk
12505' – 12507' }						Open - Blackhawk
12617' – 12619' }						Open - Mancos
12680' – 12682' }						Open - Mancos
12749' – 12751' }						Open - Mancos
12890' – 12892' }	Frac w/	48,578	Lbs in	108,864	Gals	Open - Mancos
12992' – 12994' }						Open - Mancos
13074' – 13076' }						Open - Mancos
13108' – 13110' }						Open - Mancos
13191' – 13193' }						Open - Mancos
13321' – 13323' }						Open - Mancos
13479' – 13481' }						Open - Mancos

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13595' – 13597'	}	Frac w/	45,598	Lbs in	108,066	Gals	Open - Mancos
13660' – 13662'							Open - Mancos
13753' – 13755'							Open - Mancos
13838' – 13840'							Open - Mancos
13929' – 13931'							Open - Mancos
14056' – 14058'							Open - Mancos
14136' – 14138'							Open - Mancos
14252' – 14254'	}	Frac w/	38,267	Lbs in	103,530	Gals	Open - Mancos
14364' – 14366'							Open - Mancos
14465' – 14467'							Open - Mancos
14580' – 14582'							Open - Mancos
14663' – 14665'							Open - Mancos
14722' – 14724'							Open - Mancos
14786' – 14788'							Open - Mancos
14896' – 14898'	}	Frac w/	12,744	Lbs in	56,070	Gals	Open - Mancos
15013' – 15015'							Open - Mancos
15114' – 15116'							Open - Mancos
15221' – 15223'							Open - Mancos
15326' – 15328'							Open - Mancos
15409' – 15411'							Open - Mancos
15480' – 15482'							Open - Mancos
15600' – 15602'	}	Frac w/	32,767	Lbs in	98,196	Gals	Open - Mancos
15680' – 15682'							Open - Mancos
15758' – 15760'							Open - Mancos
15896' – 15898'							Open - Frontier
15964' – 15966'							Open - Frontier
16064' – 16066'							Open - Frontier
16177' – 16179'							Open - Frontier
16303' – 16305'	}	Frac w/	38,184	Lbs in	102,648	Gals	Open - Frontier
16359' – 16361'							Open - Frontier
16478' – 16480'							Open - Frontier
16563' – 16565'							Open - Frontier
16682' – 16684'							Open - Dakota Silt
16803' – 16805'							Open - Dakota Silt
16881' – 16883'							
16999' – 17001'	}	Frac w/	71,759	Lbs in	61,068	Gals	Open - Dakota
17008' – 17012'							Open - Dakota
17031' – 17035'							Open - Dakota
17118' – 17120'							Open - Dakota
17131' – 17133'							Open - Dakota

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UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

**SUNDRY NOTICES AND REPORTS ON WELLS**

**Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.**

FORM APPROVED  
OMB No. 1004-0137  
Expires: July 31, 2010

5. Lease Serial No.

UTU-68220

6. If Indian, Allottee or Tribe Name

UTE TRIBE

**SUBMIT IN TRIPLICATE – Other instructions on page 2.**

1. Type of Well

☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator

QUESTAR EXPLORATION & PRODUCTION CO.

CONTACT: Mike Stahl

3a. Address

11002 EAST 17500 SOUTH, VERNAL, UTAH 84078

3b. Phone No. (include area code)

(303) 308-3613

7. If Unit of CA/Agreement, Name and/or No.

N/A

8. Well Name and No.

GH 7D-19-8-21

9. API Well No.

43-047-38267

10. Field and Pool or Exploratory Area

GYPSUM HILLS

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

2036' FNL 1790' FEL, SWNE, SECTION 19, T8S, R21E

11. Country or Parish, State

UINTAH, UTAH

**12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA**

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other <u>COMMINGLING</u>
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

In Compliance with the Administrative Utah code for drilling and operating practice R649-3-22, completion into two or more pools. Questar Exploration & Production Company hereby requests the commingling of production between intervals in the GH 7D-19-8-21. Questar considers this commingling to be in the public interest in that it promotes maximum ultimate economic recovery, prevents waste, provides for orderly and efficient production of oil and gas and presents no detrimental effects from commingling the gas streams.

Questar requests approval for the commingling of production of the Dakota and Wasatch intervals. Based upon offset production logs, the proposed initial allocation is as follows: Dakota - 20% ; Mancos - 40% ; Mesa Verde - 25% ; Wasatch - 15%.

On an annual basis the gas will be sampled and a determination will be made of the BTU content and gas constituents. These annual samples can be used to determine if the gas allocation is changing over time. If these samples do not indicate that any adjustments in allocation are necessary they may be discontinued after the fifth anniversary of the initial production.

COPY SENT TO OPERATOR

Date: 4/14/2009

Initials: KS

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed)

Laura Bills

Title Associate Regulatory Affairs Analyst

Signature

*Laura Bills*

Date 03/12/2009

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by

*[Signature]*

Title

*Pet Eng.*

Date

*4/13/09*

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

*DOGM* **RECEIVED**

Federal Approval Of This  
Action Is Necessary

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

DIV. OF OIL, GAS & MINING

**CONFIDENTIAL**

## AFFIDAVIT OF NOTICE

STATE OF COLORADO     )  
  ) ss:  
COUNTY OF DENVER     )

Nathan C. Koeniger, being duly sworn, deposes and says:


1. That I am employed by Questar Exploration and Production Company in the capacity as a Landman. My business address is:

Independence Plaza  
1050 17<sup>th</sup> Street, Suite 500  
Denver, CO 80265

2. In my capacity as a Landman, pursuant to the provisions of Utah Administrative Rule 649-3-22, I have provided a copy of Questar Exploration and Production Company's application for completion of the GH 7D-19-8-21 well into two or more pools, in the form of Utah Division of Oil, Gas and Mining's Form 9 Sundry Notice, to owners of all contiguous oil and gas leases or drilling units overlying the pools which are the subject of that application.
3. In my capacity as a Landman, I am authorized to provide such notice of Questar Exploration and Production Company's application to contiguous owners and to make this affidavit on this 4<sup>th</sup> day of March 2009.

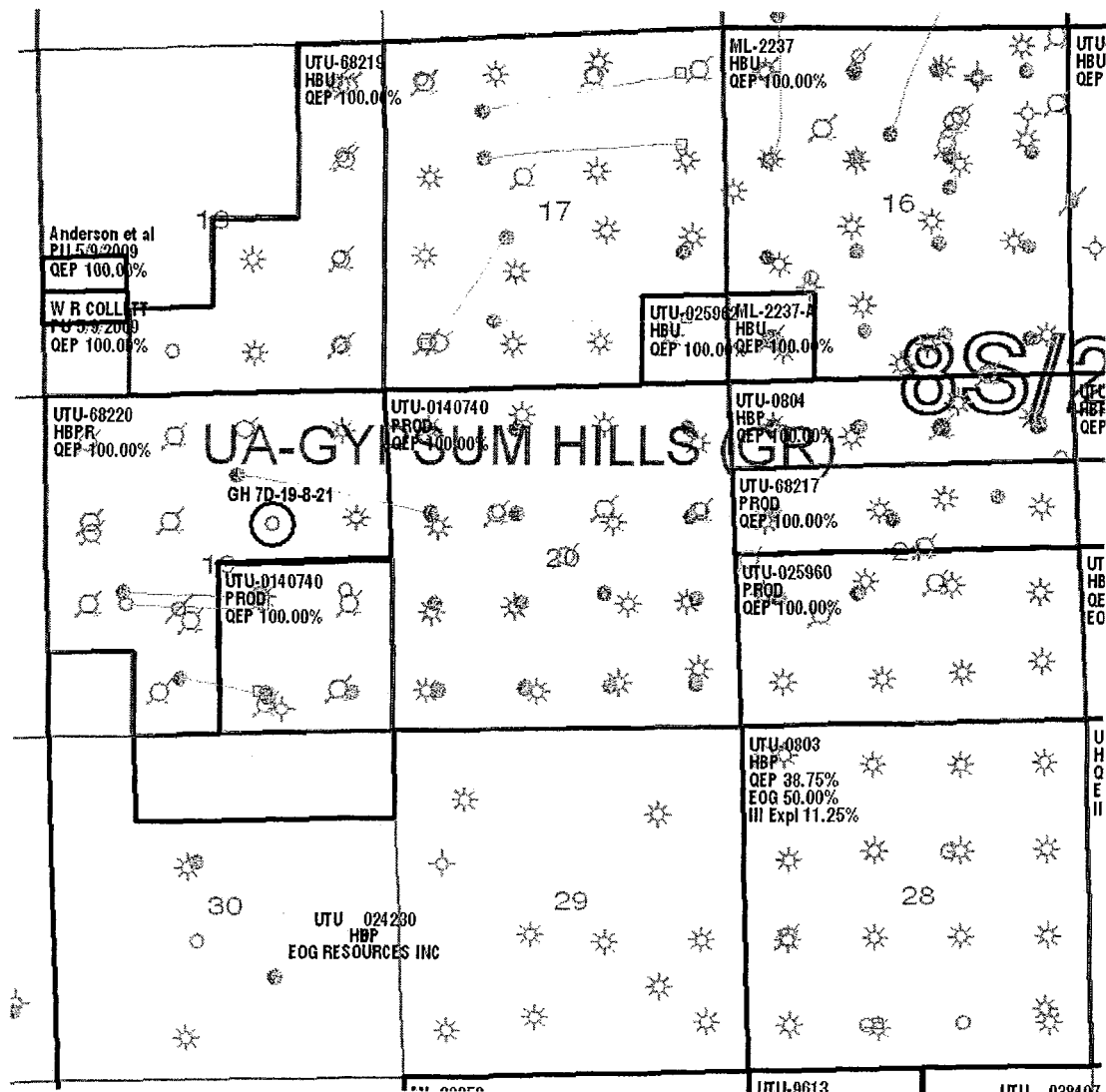
  
Printed Name: Nathan C. Koeniger

The foregoing instrument was sworn to and subscribed before me this 4<sup>th</sup> day of March 2009, by Nathan C. Koeniger.

  
Notary Public

MY COMMISSION EXPIRES: 7/7/11

THERESA CHATMAN -NOTARY PUBLIC- STATE OF COLORADO
---



T8S-R21E

○ Commingled well

**Tw / Kmv**  
**COMMINGLED PRODUCTION**

Uinta Basin—Uintah County, Utah

**Well: GH 7D-19-8-21**  
**Lease: UTU 68220**

**QUESTAR**  
Exploration and  
Production

1050 17th St., # 500 Denver, CO 80265

Geologist:

Landman: Chad Matney

Date: September 16, 2008

ENTITY ACTION FORM - FORM 6

OPERATOR: Questar Exploration & Production Co.  
ADDRESS: 11002 East 17500 South  
Vernal, Utah 84078 (435)781-4342

OPERATOR ACCT. No. N-5085

Action Code	Current Entity No.	New Entity No.	API Number	Well Name	QQ	SC	TP	RG	County	Spud Date	Effective Date
E	16922	16922	43-047-38267	GH 7D 19 8 21	SWNE	19	8S	21E	Uintah	6/7/08	3/1/09

WELL 1 COMMENTS: WMMFD

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4/14/09

WELL 2 COMMENTS:

WELL 3 COMMENTS:

WELL 4 COMMENTS:


WELL 5 COMMENTS:

ACTION CODES (See instructions on back of form)

- A - Establish new entity for new well (single well only)
- B - Add new well to existing entity (group or unit well)
- C - Re-assign well from one existing entity to another existing entity
- D - Re-assign well from one existing entity to a new entity
- E - Other (explain in comments section)

NOTE: Use COMMENT section to explain why each Action Code was selected

(3/89)

  
Signature

Office Administrator 4/10/09  
Title Date

Phone No. (435)781-4342

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APR 13 2009

DIV. OF OIL, GAS & MINING

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Division of Oil, Gas and Mining  
**OPERATOR CHANGE WORKSHEET** (for state use only)

**ROUTING**  
 CDW

Change of Operator (Well Sold)

**X - Operator Name Change**

The operator of the well(s) listed below has changed, effective:

**6/14/2010**

<b>FROM:</b> (Old Operator): N5085-Questar Exploration and Production Company 1050 17th St, Suite 500 Denver, CO 80265  Phone: 1 (303) 308-3048	<b>TO:</b> ( New Operator): N3700-QEP Energy Company 1050 17th St, Suite 500 Denver, CO 80265  Phone: 1 (303) 308-3048
--	---

**CA No.**

**Unit:**

WELL NAME	SEC	TWN	RNG	API NO	ENTITY NO	LEASE TYPE	WELL TYPE	WELL STATUS
SEE ATTACHED								

**OPERATOR CHANGES DOCUMENTATION**

Enter date after each listed item is completed

- (R649-8-10) Sundry or legal documentation was received from the **FORMER** operator on: 6/28/2010
- (R649-8-10) Sundry or legal documentation was received from the **NEW** operator on: 6/28/2010
- The new company was checked on the **Department of Commerce, Division of Corporations Database** on: 6/24/2010
- Is the new operator registered in the State of Utah: Business Number: 764611-0143
- (R649-9-2) Waste Management Plan has been received on: Requested
- Inspections of LA PA state/fee well sites complete on: n/a
- Reports current for Production/Disposition & Sundries on: ok
- Federal and Indian Lease Wells:** The BLM and or the BIA has approved the merger, name change, or operator change for all wells listed on Federal or Indian leases on: BLM 8/16/2010 BIA not yet
- Federal and Indian Units:**  
The BLM or BIA has approved the successor of unit operator for wells listed on: 8/16/2010
- Federal and Indian Communization Agreements ("CA"):**  
The BLM or BIA has approved the operator for all wells listed within a CA on: N/A
- Underground Injection Control ("UIC")** Division has approved UIC Form 5 Transfer of Authority to Inject, for the enhanced/secondary recovery unit/project for the water disposal well(s) listed on: 6/29/2010

**DATA ENTRY:**

- Changes entered in the **Oil and Gas Database** on: 6/30/2010
- Changes have been entered on the **Monthly Operator Change Spread Sheet** on: 6/30/2010
- Bond information entered in RBDMS on: 6/30/2010
- Fee/State wells attached to bond in RBDMS on: 6/30/2010
- Injection Projects to new operator in RBDMS on: 6/30/2010
- Receipt of Acceptance of Drilling Procedures for APD/New on: n/a

**BOND VERIFICATION:**

- Federal well(s) covered by Bond Number: ESB000024
- Indian well(s) covered by Bond Number: 965010693
- (R649-3-1) The **NEW** operator of any state/fee well(s) listed covered by Bond Number 965010695
- The **FORMER** operator has requested a release of liability from their bond on: n/a

**LEASE INTEREST OWNER NOTIFICATION:**

- (R649-2-10) The **NEW** operator of the fee wells has been contacted and informed by a letter from the Division of their responsibility to notify all interest owners of this change on: n/a

**COMMENTS:**

**STATE OF UTAH**  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

FORM 9

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

1. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER _____		5. LEASE DESIGNATION AND SERIAL NUMBER: See attached
2. NAME OF OPERATOR: Questar Exploration and Production Company <i>N5085</i>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME: See attached
3. ADDRESS OF OPERATOR: 1050 17th Street, Suite 500 CITY Denver STATE CO ZIP 80265 PHONE NUMBER: (303) 672-6900		7. UNIT or CA AGREEMENT NAME: See attached
4. LOCATION OF WELL FOOTAGES AT SURFACE: See attached COUNTY: Attached QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: STATE: UTAH		8. WELL NAME and NUMBER: See attached
		9. API NUMBER: Attached
		10. FIELD AND POOL, OR WILDCAT: See attached

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA			
TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will start: <u>6/14/2010</u>	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
<input type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion: _____	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input checked="" type="checkbox"/> OTHER: <u>Operator Name Change</u>
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Effective June 14, 2010 Questar Exploration and Production Company changed its name to QEP Energy Company. This name change involves only an internal corporate name change and no third party change of operator is involved. The same employees will continue to be responsible for operations of the properties described on the attached list. All operations will continue to be covered by bond numbers:

Federal Bond Number: 965002976 (BLM Reference No. ESB000024) *N3700*

Utah State Bond Number: ~~965003033~~

Fee Land Bond Number: ~~965003033~~ *965010695*

BIA Bond Number: ~~799446~~ *965010693*

The attached document is an all inclusive list of the wells operated by Questar Exploration and Production Company. As of June 14, 2010 QEP Energy Company assumes all rights, duties and obligations as operator of the properties as described on the list

NAME (PLEASE PRINT) <u>Morgan Anderson</u>	TITLE <u>Regulatory Affairs Analyst</u>
SIGNATURE <i>Morgan Anderson</i>	DATE <u>6/23/2010</u>

(This space for State use only)

**RECEIVED**

**JUN 28 2010**

DIV. OF OIL, GAS & MINING

(See Instructions on Reverse Side)

**APPROVED** *6/30/2009*

*Earlene Russell*  
Division of Oil, Gas and Mining  
Earlene Russell, Engineering Technician



Questar Exploration Production Company (N5085) to QEP Energy Company (N3700)  
effective June 14, 2010

well_name	sec	tpw	rng	api	entity	mineral lease	type	stat	C
WEST RIVER BEND 3-12-10-15	12	100S	150E	4301331888	14542	Federal	OW	P	C
WEST RIVER BEND 16-17-10-17	17	100S	170E	4301332057	14543	Federal	OW	P	
WEST DESERT SPRING 11-20-10-17	20	100S	170E	4301332088	14545	Federal	OW	S	
GD 8G-35-9-15	35	090S	150E	4301333821		Federal	OW	APD	C
GD 9G-35-9-15	35	090S	150E	4301333822		Federal	OW	APD	C
GD 10G-35-9-15	35	090S	150E	4301333823		Federal	OW	APD	C
GD 11G-35-9-15	35	090S	150E	4301333824		Federal	OW	APD	C
GD 12G-35-9-15	35	090S	150E	4301333825		Federal	OW	APD	C
GD 13G-35-9-15	35	090S	150E	4301333826		Federal	OW	APD	C
GD 1G-34-9-15	34	090S	150E	4301333827	16920	Federal	OW	P	
GD 2G-34-9-15	34	090S	150E	4301333828		Federal	OW	APD	C
GD 7G-34-9-15	34	090S	150E	4301333829		Federal	OW	APD	C
GD 7G-35-9-15	35	090S	150E	4301333830		Federal	OW	APD	C
GD 14G-35-9-15	35	090S	150E	4301333831		Federal	OW	APD	C
GD 15G-35-9-15	35	090S	150E	4301333832		Federal	OW	APD	C
GD 16G-35-9-15	35	090S	150E	4301333833	16921	Federal	OW	P	
GD 1G-35-9-15	35	090S	150E	4301333834		Federal	OW	APD	C
GD 2G-35-9-15	35	090S	150E	4301333835		Federal	OW	APD	C
GD 3G-35-9-15	35	090S	150E	4301333836		Federal	OW	APD	C
GD 4G-35-9-15	35	090S	150E	4301333837		Federal	OW	APD	C
GD 5G-35-9-15	35	090S	150E	4301333838		Federal	OW	APD	C
GD 6G-35-9-15	35	090S	150E	4301333839		Federal	OW	APD	C
GD 8G-34-9-15	34	090S	150E	4301333840		Federal	OW	APD	C
GD 9G-34-9-15	34	090S	150E	4301333841		Federal	OW	APD	C
GD 10G-34-9-15	34	090S	150E	4301333842		Federal	OW	APD	C
GD 15G-34-9-15	34	090S	150E	4301333843		Federal	OW	APD	C
GD 16G-34-9-15	34	090S	150E	4301333844		Federal	OW	APD	C
GOVT 18-2	18	230S	170E	4301930679	2575	Federal	OW	P	
FEDERAL 2-29-7-22	29	070S	220E	4304715423	5266	Federal	GW	TA	
UTAH FED D-1	14	070S	240E	4304715936	10699	Federal	GW	S	
UTAH FED D-2	25	070S	240E	4304715937	9295	Federal	GW	S	
PRINCE 1	10	070S	240E	4304716199	7035	Federal	GW	P	
UTAH FED D-4	14	070S	240E	4304731215	9297	Federal	GW	S	
ISLAND UNIT 16	11	100S	180E	4304731505	1061	Federal	OW	S	
EAST COYOTE FED 14-4-8-25	04	080S	250E	4304732493	11630	Federal	OW	P	
PRINCE 4	03	070S	240E	4304732677	7035	Federal	OW	P	
GH 21 WG	21	080S	210E	4304732692	11819	Federal	GW	P	
OU SG 6-14-8-22	14	080S	220E	4304732746	11944	Federal	GW	S	
FLU KNOLLS FED 23-3	03	100S	180E	4304732754	12003	Federal	OW	P	
GH 22 WG	22	080S	210E	4304732818	12336	Federal	GW	P	
OU GB 12W-20-8-22	20	080S	220E	4304733249	13488	Federal	GW	P	
OU GB 15-18-8-22	18	080S	220E	4304733364	12690	Federal	GW	P	
OU GB 3W-17-8-22	17	080S	220E	4304733513	12950	Federal	GW	P	
OU GB 5W-17-8-22	17	080S	220E	4304733514	12873	Federal	GW	P	
WV 9W-8-8-22	08	080S	220E	4304733515	13395	Federal	GW	P	
OU GB 9W-18-8-22	18	080S	220E	4304733516	12997	Federal	GW	P	
OU GB 3W-20-8-22	20	080S	220E	4304733526	13514	Federal	GW	P	
OU GB 12W-30-8-22	30	080S	220E	4304733670	13380	Federal	GW	P	
WV 10W-8-8-22	08	080S	220E	4304733814	13450	Federal	GW	P	
GH 7W-21-8-21	21	080S	210E	4304733845	13050	Federal	GW	P	
GH 9W-21-8-21	21	080S	210E	4304733846	13074	Federal	GW	P	

Bonds: BLM = ESB000024

BIA = 956010693

State = 965010695

Questar Exploration Production Company (N5085) to QEP Energy Company (N3700)  
effective June 14, 2010

well_name	sec	tpw	rng	api	entity	mineral lease	type	stat	C
GH 11W-21-8-21	21	080S	210E	4304733847	13049	Federal	GW	P	
GH 15W-21-8-21	21	080S	210E	4304733848	13051	Federal	GW	P	
WV 2W-9-8-21	09	080S	210E	4304733905	13676	Federal	GW	P	
WV 7W-22-8-21	22	080S	210E	4304733907	13230	Federal	GW	P	
WV 9W-23-8-21	23	080S	210E	4304733909	13160	Federal	GW	P	
GH 14W-20-8-21	20	080S	210E	4304733915	13073	Federal	GW	P	
OU GB 4W-30-8-22	30	080S	220E	4304733945	13372	Federal	GW	P	
OU GB 9W-19-8-22	19	080S	220E	4304733946	13393	Federal	GW	P	
OU GB 10W-30-8-22	30	080S	220E	4304733947	13389	Federal	GW	P	
OU GB 12W-19-8-22	19	080S	220E	4304733948	13388	Federal	GW	P	
GB 9W-25-8-21	25	080S	210E	4304733960	13390	Federal	GW	P	
SU 1W-5-8-22	05	080S	220E	4304733985	13369	Federal	GW	P	
SU 3W-5-8-22	05	080S	220E	4304733987	13321	Federal	OW	S	
SU 7W-5-8-22	05	080S	220E	4304733988	13235	Federal	GW	P	
SU 9W-5-8-22	05	080S	220E	4304733990	13238	Federal	GW	P	
SU 13W-5-8-22	05	080S	220E	4304733994	13236	Federal	GW	TA	
SU 15W-5-8-22	05	080S	220E	4304733996	13240	Federal	GW	P	
WV 8W-8-8-22	08	080S	220E	4304734005	13320	Federal	GW	P	
WV 14W-8-8-22	08	080S	220E	4304734007	13322	Federal	GW	S	
OU GB 6W-20-8-22	20	080S	220E	4304734018	13518	Federal	GW	P	
OU GB 5W-30-8-22	30	080S	220E	4304734025	13502	Federal	GW	P	
OU GB 11W-20-8-22	20	080S	220E	4304734039	13413	Federal	GW	P	
OU GB 4W-20-8-22	20	080S	220E	4304734043	13520	Federal	GW	P	
GH 5W-21-8-21	21	080S	210E	4304734147	13387	Federal	GW	P	
GH 6W-21-8-21	21	080S	210E	4304734148	13371	Federal	GW	P	
GH 8W-21-8-21	21	080S	210E	4304734149	13293	Federal	GW	P	
GH 10W-20-8-21	20	080S	210E	4304734151	13328	Federal	GW	P	
GH 10W-21-8-21	21	080S	210E	4304734152	13378	Federal	GW	P	
GH 12W-21-8-21	21	080S	210E	4304734153	13294	Federal	GW	P	
GH 14W-21-8-21	21	080S	210E	4304734154	13292	Federal	GW	P	
GH 16W-21-8-21	21	080S	210E	4304734157	13329	Federal	GW	P	
WV 2W-3-8-21	03	080S	210E	4304734207	13677	Federal	GW	P	
OU GB 5W-20-8-22	20	080S	220E	4304734209	13414	Federal	GW	P	
WV 6W-22-8-21	22	080S	210E	4304734272	13379	Federal	GW	P	
GH 1W-20-8-21	20	080S	210E	4304734327	13451	Federal	GW	P	
GH 2W-20-8-21	20	080S	210E	4304734328	13527	Federal	GW	P	
GH 3W-20-8-21	20	080S	210E	4304734329	13728	Federal	GW	P	
GH 7W-20-8-21	20	080S	210E	4304734332	13537	Federal	GW	P	
GH 9W-20-8-21	20	080S	210E	4304734333	13411	Federal	GW	P	
GH 11W-20-8-21	20	080S	210E	4304734334	13410	Federal	GW	P	
GH 15W-20-8-21	20	080S	210E	4304734335	13407	Federal	GW	P	
GH 16W-20-8-21	20	080S	210E	4304734336	13501	Federal	GW	P	
WV 12W-23-8-21	23	080S	210E	4304734343	13430	Federal	GW	P	
OU GB 13W-20-8-22	20	080S	220E	4304734348	13495	Federal	GW	P	
OU GB 14W-20-8-22	20	080S	220E	4304734349	13507	Federal	GW	P	
OU GB 11W-29-8-22	29	080S	220E	4304734350	13526	Federal	GW	P	
SU PURDY 14M-30-7-22	30	070S	220E	4304734384	13750	Federal	GW	S	
WVX 11G-5-8-22	05	080S	220E	4304734388	13422	Federal	OW	P	
WVX 13G-5-8-22	05	080S	220E	4304734389	13738	Federal	OW	P	
WVX 15G-5-8-22	05	080S	220E	4304734390	13459	Federal	OW	P	
SU BRENNAN W 15W-18-7-22	18	070S	220E	4304734403	13442	Federal	GW	TA	

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BIA = 956010693

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Questar Exploration Production Company (N5085) to QEP Energy Company (N3700)  
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well_name	sec	tpw	rng	api	entity	mineral lease	type	stat	C
SU 16W-5-8-22	05	080S	220E	4304734446	13654	Federal	GW	P	
SU 2W-5-8-22	05	080S	220E	4304734455	13700	Federal	GW	P	
SU 10W-5-8-22	05	080S	220E	4304734456	13540	Federal	GW	P	
WV 16W-8-8-22	08	080S	220E	4304734470	13508	Federal	GW	P	
OU GB 16WX-30-8-22	30	080S	220E	4304734506	13431	Federal	GW	P	
OU GB 1W-19-8-22	19	080S	220E	4304734512	13469	Federal	GW	P	
OU GB 2W-19-8-22	19	080S	220E	4304734513	13461	Federal	GW	P	
OU GB 5W-19-8-22	19	080S	220E	4304734514	13460	Federal	GW	P	
OU GB 7W-19-8-22	19	080S	220E	4304734515	13462	Federal	GW	P	
OU GB 8W-19-8-22	19	080S	220E	4304734516	13489	Federal	GW	P	
OU GB 11W-19-8-22	19	080S	220E	4304734517	13467	Federal	GW	P	
OU GB 16W-19-8-22	19	080S	220E	4304734522	13476	Federal	GW	P	
OU GB 1W-30-8-22	30	080S	220E	4304734528	13487	Federal	GW	S	
OU GB 3W-30-8-22	30	080S	220E	4304734529	13493	Federal	GW	P	
OU GB 6W-30-8-22	30	080S	220E	4304734530	13519	Federal	GW	P	
OU GB 7W-30-8-22	30	080S	220E	4304734531	13494	Federal	GW	P	
OU GB 8W-30-8-22	30	080S	220E	4304734532	13483	Federal	GW	P	
OU GB 9W-30-8-22	30	080S	220E	4304734533	13500	Federal	GW	P	
OU GB 6W-19-8-22	19	080S	220E	4304734534	13475	Federal	GW	P	
OU GB 10W-19-8-22	19	080S	220E	4304734535	13479	Federal	GW	P	
OU GB 13W-19-8-22	19	080S	220E	4304734536	13478	Federal	GW	P	
OU GB 14W-19-8-22	19	080S	220E	4304734537	13484	Federal	GW	P	
OU GB 15W-19-8-22	19	080S	220E	4304734538	13482	Federal	GW	P	
OU GB 12W-17-8-22	17	080S	220E	4304734542	13543	Federal	GW	P	
OU GB 6W-17-8-22	17	080S	220E	4304734543	13536	Federal	GW	P	
OU GB 13W-17-8-22	17	080S	220E	4304734544	13547	Federal	GW	P	
OU GB 6W-29-8-22	29	080S	220E	4304734545	13535	Federal	GW	P	
OU GB 3W-29-8-22	29	080S	220E	4304734546	13509	Federal	GW	P	
OU GB 13W-29-8-22	29	080S	220E	4304734547	13506	Federal	GW	P	
OU GB 4W-29-8-22	29	080S	220E	4304734548	13534	Federal	GW	P	
OU GB 5W-29-8-22	29	080S	220E	4304734549	13505	Federal	GW	P	
OU GB 14W-17-8-22	17	080S	220E	4304734550	13550	Federal	GW	P	
OU GB 11W-17-8-22	17	080S	220E	4304734553	13671	Federal	GW	P	
OU GB 14W-29-8-22	29	080S	220E	4304734554	13528	Federal	GW	P	
OU GB 2W-17-8-22	17	080S	220E	4304734559	13539	Federal	GW	P	
OU GB 7W-17-8-22	17	080S	220E	4304734560	13599	Federal	GW	P	
OU GB 16W-18-8-22	18	080S	220E	4304734563	13559	Federal	GW	P	
OU GB 1W-29-8-22	29	080S	220E	4304734573	13562	Federal	GW	P	
OU GB 7W-29-8-22	29	080S	220E	4304734574	13564	Federal	GW	P	
OU GB 8W-29-8-22	29	080S	220E	4304734575	13609	Federal	GW	S	
OU GB 9W-29-8-22	29	080S	220E	4304734576	13551	Federal	GW	P	
OU GB 10W-29-8-22	29	080S	220E	4304734577	13594	Federal	GW	P	
OU GB 15W-29-8-22	29	080S	220E	4304734578	13569	Federal	GW	P	
OU GB 2W-20-8-22	20	080S	220E	4304734599	13664	Federal	GW	P	
OU GB 2W-29-8-22	29	080S	220E	4304734600	13691	Federal	GW	P	
OU GB 15W-17-8-22	17	080S	220E	4304734601	13632	Federal	GW	P	
OU GB 16W-17-8-22	17	080S	220E	4304734602	13639	Federal	GW	P	
OU GB 16W-29-8-22	29	080S	220E	4304734603	13610	Federal	GW	P	
OU GB 1W-20-8-22	20	080S	220E	4304734604	13612	Federal	GW	P	
OU GB 1W-17-8-22	17	080S	220E	4304734623	13701	Federal	GW	P	
OU GB 9W-17-8-22	17	080S	220E	4304734624	13663	Federal	GW	P	

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well_name	sec	tpw	rng	api	entity	mineral lease	type	stat	C
OU GB 10W-17-8-22	17	080S	220E	4304734625	13684	Federal	GW	P	
OU GB 9W-20-8-22	20	080S	220E	4304734630	13637	Federal	GW	P	
OU GB 10W-20-8-22	20	080S	220E	4304734631	13682	Federal	GW	P	
OU GB 15W-20-8-22	20	080S	220E	4304734632	13613	Federal	GW	P	
OU WIH 15MU-21-8-22	21	080S	220E	4304734634	13991	Federal	GW	P	
OU WIH 13W-21-8-22	21	080S	220E	4304734646	13745	Federal	GW	P	
OU GB 11W-15-8-22	15	080S	220E	4304734648	13822	Federal	GW	P	
OU GB 13W-9-8-22	09	080S	220E	4304734654	13706	Federal	GW	P	
OU WIH 14W-21-8-22	21	080S	220E	4304734664	13720	Federal	GW	P	
OU GB 12WX-29-8-22	29	080S	220E	4304734668	13555	Federal	GW	P	
OU WIH 10W-21-8-22	21	080S	220E	4304734681	13662	Federal	GW	P	
OU GB 4G-21-8-22	21	080S	220E	4304734685	13772	Federal	OW	P	
OU GB 3W-21-8-22	21	080S	220E	4304734686	13746	Federal	GW	P	
OU GB 16SG-30-8-22	30	080S	220E	4304734688	13593	Federal	GW	P	
OU WIH 7W-21-8-22	21	080S	220E	4304734689	13716	Federal	GW	P	
OU GB 5W-21-8-22	21	080S	220E	4304734690	13770	Federal	GW	P	
WIH 1MU-21-8-22	21	080S	220E	4304734693	14001	Federal	GW	P	
OU GB 5G-19-8-22	19	080S	220E	4304734695	13786	Federal	OW	P	
OU GB 7W-20-8-22	20	080S	220E	4304734705	13710	Federal	GW	P	
OU SG 14W-15-8-22	15	080S	220E	4304734710	13821	Federal	GW	P	
OU SG 15W-15-8-22	15	080S	220E	4304734711	13790	Federal	GW	P	
OU SG 16W-15-8-22	15	080S	220E	4304734712	13820	Federal	GW	P	
OU SG 4W-15-8-22	15	080S	220E	4304734713	13775	Federal	GW	P	
OU SG 12W-15-8-22	15	080S	220E	4304734714	13838	Federal	GW	P	
OU GB 5MU-15-8-22	15	080S	220E	4304734715	13900	Federal	GW	P	
OU SG 8W-15-8-22	15	080S	220E	4304734717	13819	Federal	GW	P	
OU SG 9W-15-8-22	15	080S	220E	4304734718	13773	Federal	GW	P	
OU SG 10W-15-8-22	15	080S	220E	4304734719	13722	Federal	GW	P	
OU SG 2MU-15-8-22	15	080S	220E	4304734721	13887	Federal	GW	P	
OU SG 7W-15-8-22	15	080S	220E	4304734722	13920	Federal	GW	P	
OU GB 14SG-29-8-22	29	080S	220E	4304734743	14034	Federal	GW	P	
OU GB 16SG-29-8-22	29	080S	220E	4304734744	13771	Federal	GW	P	
OU GB 13W-10-8-22	10	080S	220E	4304734754	13774	Federal	GW	P	
OU GB 6MU-21-8-22	21	080S	220E	4304734755	14012	Federal	GW	P	
OU SG 10W-10-8-22	10	080S	220E	4304734764	13751	Federal	GW	P	
OU GB 14M-10-8-22	10	080S	220E	4304734768	13849	Federal	GW	P	
OU SG 9W-10-8-22	10	080S	220E	4304734783	13725	Federal	GW	P	
OU SG 16W-10-8-22	10	080S	220E	4304734784	13781	Federal	GW	P	
SU BW 6M-7-7-22	07	070S	220E	4304734837	13966	Federal	GW	P	
GB 3M-27-8-21	27	080S	210E	4304734900	14614	Federal	GW	P	
WVX 11D-22-8-21	22	080S	210E	4304734902	14632	Federal	GW	P	
GB 11M-27-8-21	27	080S	210E	4304734952	13809	Federal	GW	P	
GB 9D-27-8-21	27	080S	210E	4304734956	14633	Federal	GW	P	
GB 1D-27-8-21	27	080S	210E	4304734957	14634	Federal	GW	P	
WRU EIH 2M-35-8-22	35	080S	220E	4304735052	13931	Federal	GW	P	
GH 12MU-20-8-21	20	080S	210E	4304735069	14129	Federal	GW	P	
OU SG 4W-11-8-22	11	080S	220E	4304735071	14814	Federal	GW	OPS	C
OU SG 5W-11-8-22	11	080S	220E	4304735072	14815	Federal	GW	OPS	C
SG 6ML-11-8-22	11	080S	220E	4304735073	14825	Federal	GW	P	
OU SG 5MU-14-8-22	14	080S	220E	4304735076	13989	Federal	GW	P	
OU SG 6MU-14-8-22	14	080S	220E	4304735077	14128	Federal	GW	P	

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SG 12MU-14-8-22	14	080S	220E	4304735078	13921	Federal	GW	P	
OU SG 13MU-14-8-22	14	080S	220E	4304735079	13990	Federal	GW	P	
OU SG 9MU-11-8-22	11	080S	220E	4304735091	13967	Federal	GW	P	
SG 11SG-23-8-22	23	080S	220E	4304735099	13901	Federal	GW	TA	
OU SG 14W-11-8-22	11	080S	220E	4304735114	14797	Federal	GW	OPS	C
SG 5MU-23-8-22	23	080S	220E	4304735115	14368	Federal	GW	P	
SG 6MU-23-8-22	23	080S	220E	4304735116	14231	Federal	GW	P	
SG 14MU-23-8-22	23	080S	220E	4304735117	14069	Federal	GW	P	
SG 12MU-23-8-22	23	080S	220E	4304735188	14412	Federal	GW	P	
SG 13MU-23-8-22	23	080S	220E	4304735190	14103	Federal	GW	P	
WH 7G-10-7-24	10	070S	240E	4304735241	14002	Federal	GW	S	
GB 4D-28-8-21	28	080S	210E	4304735246	14645	Federal	GW	P	
GB 7M-28-8-21	28	080S	210E	4304735247	14432	Federal	GW	P	
GB 14M-28-8-21	28	080S	210E	4304735248	13992	Federal	GW	P	
SG 11MU-23-8-22	23	080S	220E	4304735257	13973	Federal	GW	P	
SG 15MU-14-8-22	14	080S	220E	4304735328	14338	Federal	GW	P	
EIHX 14MU-25-8-22	25	080S	220E	4304735330	14501	Federal	GW	P	
EIHX 11MU-25-8-22	25	080S	220E	4304735331	14470	Federal	GW	P	
NBE 12ML-10-9-23	10	090S	230E	4304735333	14260	Federal	GW	P	
NBE 13ML-17-9-23	17	090S	230E	4304735334	14000	Federal	GW	P	
NBE 4ML-26-9-23	26	090S	230E	4304735335	14215	Federal	GW	P	
SG 7MU-11-8-22	11	080S	220E	4304735374	14635	Federal	GW	S	
SG 1MU-11-8-22	11	080S	220E	4304735375	14279	Federal	GW	P	
OU SG 13W-11-8-22	11	080S	220E	4304735377	14796	Federal	GW	OPS	C
SG 3MU-11-8-22	11	080S	220E	4304735379	14978	Federal	GW	P	
SG 8MU-11-8-22	11	080S	220E	4304735380	14616	Federal	GW	P	
SG 2MU-11-8-22	11	080S	220E	4304735381	14636	Federal	GW	P	
SG 10MU-11-8-22	11	080S	220E	4304735382	14979	Federal	GW	P	
SU 11MU-9-8-21	09	080S	210E	4304735412	14143	Federal	GW	P	
OU GB 8MU-10-8-22	10	080S	220E	4304735422	15321	Federal	GW	OPS	C
EIHX 2MU-25-8-22	25	080S	220E	4304735427	14666	Federal	GW	P	
EIHX 1MU-25-8-22	25	080S	220E	4304735428	14705	Federal	GW	P	
EIHX 7MU-25-8-22	25	080S	220E	4304735429	14682	Federal	GW	P	
EIHX 8MU-25-8-22	25	080S	220E	4304735430	14706	Federal	GW	P	
EIHX 9MU-25-8-22	25	080S	220E	4304735433	14558	Federal	GW	P	
EIHX 16MU-25-8-22	25	080S	220E	4304735434	14502	Federal	GW	P	
EIHX 15MU-25-8-22	25	080S	220E	4304735435	14571	Federal	GW	P	
EIHX 10MU-25-8-22	25	080S	220E	4304735436	14537	Federal	GW	P	
GB 3MU-3-8-22	03	080S	220E	4304735457	14575	Federal	GW	P	
NBE 15M-17-9-23	17	090S	230E	4304735463	14423	Federal	GW	P	
NBE 7ML-17-9-23	17	090S	230E	4304735464	14232	Federal	GW	P	
NBE 3ML-17-9-23	17	090S	230E	4304735465	14276	Federal	GW	P	
NBE 11M-17-9-23	17	090S	230E	4304735466	14431	Federal	GW	P	
NBE 10ML-10-9-23	10	090S	230E	4304735650	14377	Federal	GW	P	
NBE 6ML-10-9-23	10	090S	230E	4304735651	14422	Federal	GW	P	
NBE 12ML-17-9-23	17	090S	230E	4304735652	14278	Federal	GW	P	
NBE 6ML-26-9-23	26	090S	230E	4304735664	14378	Federal	GW	P	
NBE 11ML-26-9-23	26	090S	230E	4304735665	14340	Federal	GW	P	
NBE 15ML-26-9-23	26	090S	230E	4304735666	14326	Federal	GW	P	
SG 4MU-23-8-22	23	080S	220E	4304735758	14380	Federal	GW	P	
SG 11MU-14-8-22	14	080S	220E	4304735829	14486	Federal	GW	P	

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well_name	sec	tpw	rng	api	entity	mineral lease	type	stat	C
RB DS FED 1G-7-10-18	07	100S	180E	4304735932	14457	Federal	OW	S	
RB DS FED 14G-8-10-18	08	100S	180E	4304735933	14433	Federal	OW	P	
OU SG 14MU-14-8-22	14	080S	220E	4304735950	14479	Federal	GW	P	
COY 12ML-24-8-24	24	080S	240E	4304736039	14592	Federal	OW	P	
WIH 1AMU-21-8-22	21	080S	220E	4304736060	14980	Federal	GW	P	
SU 8M-12-7-21	12	070S	210E	4304736096	16610	Federal	GW	OPS	C
NBE 4ML-10-9-23	10	090S	230E	4304736098	15732	Federal	GW	P	
NBE 8ML-10-9-23	10	090S	230E	4304736099	15733	Federal	GW	P	
NBE 16ML-10-9-23	10	090S	230E	4304736100	14728	Federal	GW	S	
SUBW 14M-7-7-22	07	070S	220E	4304736136	15734	Federal	GW	P	
NBE 8ML-12-9-23	12	090S	230E	4304736143	15859	Federal	GW	S	
GB 16D-28-8-21	28	080S	210E	4304736260	14981	Federal	GW	P	
NBE 5ML-10-9-23	10	090S	230E	4304736353	15227	Federal	GW	P	
NBE 7ML-10-9-23	10	090S	230E	4304736355	15850	Federal	GW	P	
NBE 3ML-10-9-23	10	090S	230E	4304736356	15393	Federal	GW	P	
EIHX 4MU-36-8-22	36	080S	220E	4304736444	14875	Federal	GW	P	
EIHX 3MU-36-8-22	36	080S	220E	4304736445	14860	Federal	GW	P	
EIHX 2MU-36-8-22	36	080S	220E	4304736446	14840	Federal	GW	S	
EIHX 1MU-36-8-22	36	080S	220E	4304736447	14861	Federal	GW	P	
NBE 7ML-26-9-23	26	090S	230E	4304736587	16008	Federal	GW	P	
NBE 8ML-26-9-23	26	090S	230E	4304736588	15689	Federal	GW	P	
NBE 1ML-26-9-23	26	090S	230E	4304736589	15880	Federal	GW	P	
NBE 2ML-26-9-23	26	090S	230E	4304736590	15898	Federal	GW	S	
NBE 3ML-26-9-23	26	090S	230E	4304736591	15906	Federal	GW	P	
NBE 5ML-26-9-23	26	090S	230E	4304736592	15839	Federal	GW	P	
NBE 9ML-10-9-23	10	090S	230E	4304736593	15438	Federal	GW	P	
NBE 11ML-10-9-23	10	090S	230E	4304736594	15228	Federal	GW	P	
NBE 15ML-10-9-23	10	090S	230E	4304736595	15439	Federal	GW	P	
NBE 2ML-17-9-23	17	090S	230E	4304736614	15126	Federal	GW	P	
NBE 4ML-17-9-23	17	090S	230E	4304736615	15177	Federal	GW	P	
NBE 6ML-17-9-23	17	090S	230E	4304736616	15127	Federal	GW	S	
NBE 10ML-17-9-23	17	090S	230E	4304736617	15128	Federal	GW	P	
NBE 14ML-17-9-23	17	090S	230E	4304736618	15088	Federal	GW	P	
NBE 9ML-26-9-23	26	090S	230E	4304736619	15322	Federal	GW	P	
NBE 10D-26-9-23	26	090S	230E	4304736620	15975	Federal	GW	S	
NBE 12ML-26-9-23	26	090S	230E	4304736621	15840	Federal	GW	P	
NBE 13ML-26-9-23	26	090S	230E	4304736622	15690	Federal	GW	P	
NBE 14ML-26-9-23	26	090S	230E	4304736623	15262	Federal	GW	P	
NBE 16ML-26-9-23	26	090S	230E	4304736624	15735	Federal	GW	P	
WF 1P-1-15-19	06	150S	200E	4304736781	14862	Indian	GW	P	
SG 3MU-23-8-22	14	080S	220E	4304736940	15100	Federal	GW	P	
NBE 5ML-17-9-23	17	090S	230E	4304736941	15101	Federal	GW	P	
TU 14-9-7-22	09	070S	220E	4304737345	16811	Federal	GW	OPS	C
WF 14C-29-15-19	29	150S	190E	4304737541	15178	Indian	GW	P	
NBE 2ML-10-9-23	10	090S	230E	4304737619	15860	Federal	GW	P	
GB 16ML-20-8-22	20	080S	220E	4304737664	15948	Federal	GW	P	
WVX 8ML-5-8-22	05	080S	220E	4304738140		Federal	GW	APD	C
WVX 6ML-5-8-22	05	080S	220E	4304738141		Federal	GW	APD	C
WVX 1MU-17-8-21	17	080S	210E	4304738156		Federal	GW	APD	C
GH 8-20-8-21	20	080S	210E	4304738157		Federal	GW	APD	C
WVX 4MU-17-8-21	17	080S	210E	4304738190		Federal	GW	APD	C

Bonds: BLM = ESB000024

BIA = 956010693

State = 965010695

Questar Exploration Production Company (N5085) to QEP Energy Company (N3700)  
effective June 14, 2010

well_name	sec	tpw	rng	api	entity	mineral lease	type	stat	C
WVX 16MU-18-8-21	18	080S	210E	4304738191		Federal	GW	APD	C
GH 7D-19-8-21	19	080S	210E	4304738267	16922	Federal	GW	P	
WF 8C-15-15-19	15	150S	190E	4304738405	17142	Indian	GW	OPS	C
WVX 1MU-18-8-21	18	080S	210E	4304738659		Federal	GW	APD	C
WVX 9MU-18-8-21	18	080S	210E	4304738660		Federal	GW	APD	C
GB 12SG-29-8-22	29	080S	220E	4304738766	16096	Federal	GW	S	
GB 10SG-30-8-22	30	080S	220E	4304738767	16143	Federal	GW	S	
FR 14P-20-14-20	20	140S	200E	4304739168	16179	Federal	GW	P	
SU 11M-8-7-22	08	070S	220E	4304739175		Federal	GW	APD	C
HB 2M-9-7-22	09	070S	220E	4304739176		Federal	GW	APD	C
SUMA 4M-20-7-22	20	070S	220E	4304739177		Federal	GW	APD	C
SU 16M-31-7-22	31	070S	220E	4304739178		Federal	GW	APD	C
FR 13P-20-14-20	20	140S	200E	4304739226	16719	Federal	GW	P	
SG 11BML-23-8-22	23	080S	220E	4304739230		Federal	GW	APD	C
SG 12DML-23-8-22	23	080S	220E	4304739231		Federal	GW	APD	C
GB 1CML-29-8-22	29	080S	220E	4304739232		Federal	GW	APD	C
NBE 8CD-10-9-23	10	090S	230E	4304739341	16513	Federal	GW	P	
NBE 15AD-10-9-23	10	090S	230E	4304739342		Federal	GW	APD	C
NBE 6DD-10-9-23	10	090S	230E	4304739343		Federal	GW	APD	C
NBE 6AD-10-9-23	10	090S	230E	4304739344		Federal	GW	APD	C
NBE 6BD-10-9-23	10	090S	230E	4304739345		Federal	GW	APD	C
NBE 5DD-10-9-23	10	090S	230E	4304739346	16574	Federal	GW	P	
NBE 7BD-17-9-23	17	090S	230E	4304739347		Federal	GW	APD	C
NBE 4DD-17-9-23	17	090S	230E	4304739348	16743	Federal	GW	P	
NBE 10CD-17-9-23	17	090S	230E	4304739349	16616	Federal	GW	P	
NBE 11CD-17-9-23	17	090S	230E	4304739350		Federal	GW	APD	C
NBE 8BD-26-9-23	26	090S	230E	4304739351	16617	Federal	GW	P	
NBE 3DD-26-9-23	26	090S	230E	4304739352		Federal	GW	APD	C
NBE 3CD-26-9-23	26	090S	230E	4304739353		Federal	GW	APD	C
NBE 7DD-26-9-23	26	090S	230E	4304739354		Federal	GW	APD	C
NBE 12AD-26-9-23	26	090S	230E	4304739355		Federal	GW	APD	C
NBE 5DD-26-9-23	26	090S	230E	4304739356		Federal	GW	APD	C
NBE 13AD-26-9-23	26	090S	230E	4304739357		Federal	GW	APD	C
NBE 14AD-26-9-23	26	090S	230E	4304739358		Federal	GW	APD	C
NBE 9CD-26-9-23	26	090S	230E	4304739359		Federal	GW	APD	C
FR 9P-20-14-20	20	140S	200E	4304739461	17025	Federal	GW	S	
FR 13P-17-14-20	17	140S	200E	4304739462		Federal	GW	APD	C
FR 9P-17-14-20	17	140S	200E	4304739463	16829	Federal	GW	P	
FR 10P-20-14-20	20	140S	200E	4304739465		Federal	GW	APD	C
FR 5P-17-14-20	17	140S	200E	4304739509		Federal	GW	APD	C
FR 15P-17-14-20	17	140S	200E	4304739510		Federal	GW	APD	C
FR 11P-20-14-20	20	140S	200E	4304739587		Federal	GW	APD	
FR 5P-20-14-20	20	140S	200E	4304739588		Federal	GW	APD	C
FR 9P-21-14-20	21	140S	200E	4304739589		Federal	GW	APD	C
FR 13P-21-14-20	21	140S	200E	4304739590		Federal	GW	APD	C
GB 7D-27-8-21	27	080S	210E	4304739661		Federal	GW	APD	C
GB 15D-27-8-21	27	080S	210E	4304739662	16830	Federal	GW	P	
WV 13D-23-8-21	23	080S	210E	4304739663	16813	Federal	GW	P	
WV 15D-23-8-21	23	080S	210E	4304739664	16924	Federal	GW	P	
FR 14P-17-14-20	17	140S	200E	4304739807		Federal	GW	APD	C
FR 12P-20-14-20	20	140S	200E	4304739808		Federal	GW	APD	C

Bonds: BLM = ESB000024

BIA = 956010693

State = 965010695



Questar Exploration Production Company (N5085) to QEP Energy Company (N3700)  
effective June 14, 2010

well_name	sec	tpw	rng	api	entity	mineral lease	type	stat	C
FR 6P-20-14-20	20	140S	200E	4304739809	16925	Federal	GW	P	
FR 3P-21-14-20	21	140S	200E	4304739810		Federal	GW	APD	C
FR 4P-21-14-20	21	140S	200E	4304739811	16771	Federal	GW	P	
FR 8P-21-14-20	21	140S	200E	4304739812		Federal	GW	APD	C
FR 15P-21-14-20	21	140S	200E	4304739815		Federal	GW	APD	C
FR 2P-20-14-20	20	140S	200E	4304740053		Federal	GW	APD	
FR 2P-21-14-20	21	140S	200E	4304740200		Federal	GW	APD	C
WV 11-23-8-21	23	080S	210E	4304740303		Federal	GW	APD	C
GB 12-27-8-21	27	080S	210E	4304740304		Federal	GW	APD	C
GH 11C-20-8-21	20	080S	210E	4304740352		Federal	GW	APD	C
GH 15A-20-8-21	20	080S	210E	4304740353		Federal	GW	APD	C
GH 10BD-21-8-21	21	080S	210E	4304740354		Federal	GW	APD	C
FR 11P-21-14-20	21	140S	200E	4304740366		Federal	GW	APD	C
MELANGE U 1	09	140S	200E	4304740399		Federal	GW	APD	C
OP 16G-12-7-20	12	070S	200E	4304740481	17527	Federal	OW	DRL	C
OP 4G-12-7-20	12	070S	200E	4304740482		Federal	OW	APD	C
WF 8D-21-15-19	21	150S	190E	4304740489		Indian	GW	APD	C
WF 15-21-15-19	21	150S	190E	4304740490		Indian	GW	APD	
WF 4D-22-15-19	22	150S	190E	4304740491		Indian	GW	APD	C

Bonds: BLM = ESB000024

BIA = 956010693

State = 965010695





## United States Department of the Interior

### BUREAU OF LAND MANAGEMENT

Utah State Office

P.O. Box 45155

Salt Lake City, UT 84145-0155

<http://www.blm.gov/ut/st/en.html>



IN REPLY REFER TO:

3100

(UT-922)

JUL 28 2010

#### Memorandum

To: Vernal Field Office, Price Field Office, Moab Field Office

From: Chief, Branch of Minerals

*Roger L. Bankert*

Subject: Name Change Recognized

Attached is a copy of the Certificate of Name Change issued by the Texas Secretary of State and a decision letter recognizing the name change from the Eastern States Office. We have updated our records to reflect the name change in the attached list of leases.

The name change from **Questar Exploration and Production Company** into **QEP Energy Company** is effective June 8, 2010.

cc: MMS  
UDOGM

RECEIVED  
AUG 16 2010

DIV. OF OIL, GAS & MINES